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\* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \* \* \* \* \*

NEWS 1 Web Page for STN Seminar Schedule - N. America  
NEWS 2 JUL 28 CA/CAplus patent coverage enhanced  
NEWS 3 JUL 28 EPFULL enhanced with additional legal status information from the epoline Register  
NEWS 4 JUL 28 IFICDB, IFIPAT, and IFIUDB reloaded with enhancements  
NEWS 5 JUL 28 STN Viewer performance improved  
NEWS 6 AUG 01 INPADOCDB and INPAFAMDB coverage enhanced  
NEWS 7 AUG 13 CA/CAplus enhanced with printed Chemical Abstracts page images from 1967-1998  
NEWS 8 AUG 15 CAOLD to be discontinued on December 31, 2008  
NEWS 9 AUG 15 CAplus currency for Korean patents enhanced  
NEWS 10 AUG 27 CAS definition of basic patents expanded to ensure comprehensive access to substance and sequence information  
NEWS 11 SEP 18 Support for STN Express, Versions 6.01 and earlier, to be discontinued  
NEWS 12 SEP 25 CA/CAplus current-awareness alert options enhanced to accommodate supplemental CAS indexing of exemplified prophetic substances  
NEWS 13 SEP 26 WPIDS, WPINDEX, and WPIX coverage of Chinese and and Korean patents enhanced  
NEWS 14 SEP 29 IFICLS enhanced with new super search field  
NEWS 15 SEP 29 EMBASE and EMBAL enhanced with new search and display fields  
NEWS 16 SEP 30 CAS patent coverage enhanced to include exemplified prophetic substances identified in new Japanese-language patents  
NEWS 17 OCT 07 EPFULL enhanced with full implementation of EPC2000  
NEWS 18 OCT 07 Multiple databases enhanced for more flexible patent number searching  
NEWS 19 OCT 22 Current-awareness alert (SDI) setup and editing enhanced  
NEWS 20 OCT 22 WPIDS, WPINDEX, and WPIX enhanced with Canadian PCT Applications  
NEWS 21 OCT 24 CHEMLIST enhanced with intermediate list of pre-registered REACH substances

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,  
AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS LOGIN Welcome Banner and News Items  
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 15:28:01 ON 17 NOV 2008

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=>
Uploading
THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE
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Do you want t

Choice (Y/n) :

Switching to the Registry File...  
Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 15:28:31 ON 17 NOV 2008  
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 16 NOV 2008 HIGHEST RN 1072892-84-2  
DICTIONARY FILE UPDATES: 16 NOV 2008 HIGHEST RN 1072892-84-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

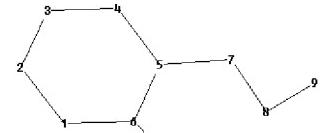
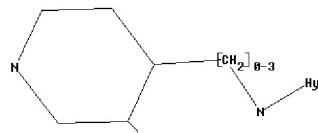
TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stn/gen/stndoc/properties.html>

=>  
Uploading C:\Program Files\STNEXP\Queries\piperidines-N-aryl.str



chain nodes :

7 8 9 12

ring nodes :

1 2 3 4 5 6

chain bonds :

5-7 6-12 7-8 8-9

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6

exact/norm bonds :

1-2 1-6 2-3 3-4 4-5 5-6 6-12 8-9

exact bonds :

5-7 7-8

G1:H, F

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:Atom 12:CLASS

Generic attributes :

9:

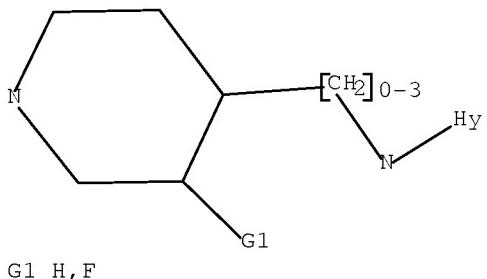
Saturation : Unsaturated

L1 STRUCTURE UPLOADED

=> D L1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> S SSS SAM L1

SAMPLE SEARCH INITIATED 15:28:49 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 112985 TO ITERATE

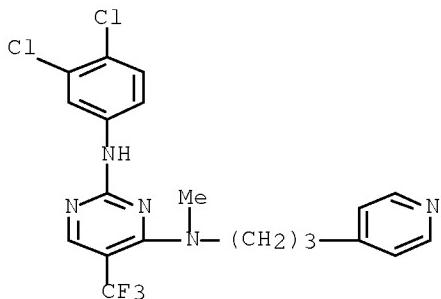
1.8% PROCESSED 2000 ITERATIONS 35 ANSWERS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*  
BATCH \*\*INCOMPLETE\*\*  
PROJECTED ITERATIONS: 2239759 TO 2279641  
PROJECTED ANSWERS: 36877 TO 42211

L2 35 SEA SSS SAM L1

=> D SCAN

L2 35 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN  
IN 2,4-Pyrimidinediamine, N2-(3,4-dichlorophenyl)-N4-methyl-N4-[3-(4-pyridinyl)propyl]-5-(trifluoromethyl)-  
MF C20 H18 Cl2 F3 N5

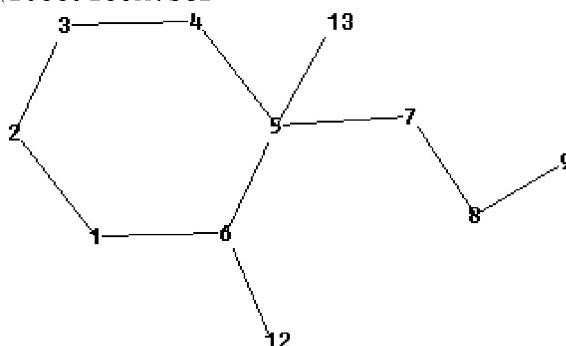
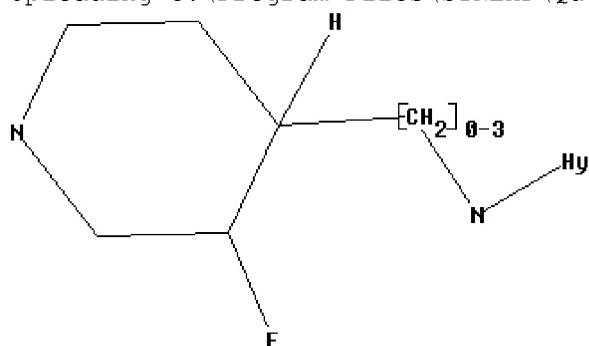


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=>

Uploading C:\Program Files\STNEXP\Queries\10559153A.str



chain nodes :

7 8 9 12 13

ring nodes :

1 2 3 4 5 6

chain bonds :

5-7 5-13 6-12 7-8 8-9

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6

exact/norm bonds :

1-2 1-6 2-3 3-4 4-5 5-6 8-9

exact bonds :

5-7 5-13 6-12 7-8

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:Atom 12:CLASS  
13:CLASS

Generic attributes :

9:

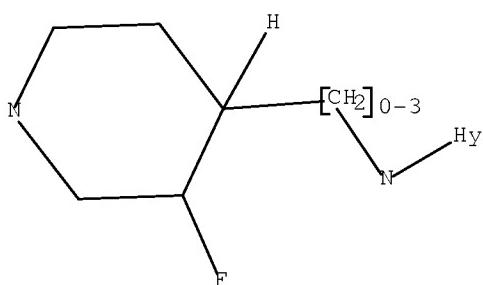
Saturation : Unsaturated

L3 STRUCTURE UPLOADED

=> D L3

L3 HAS NO ANSWERS

L3 STR



Structure attributes must be viewed using STN Express query preparation.

=> S SSS SAM L3

SAMPLE SEARCH INITIATED 15:32:08 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 1274 TO ITERATE

100.0% PROCESSED 1274 ITERATIONS  
SEARCH TIME: 00.00.01

2 ANSWERS

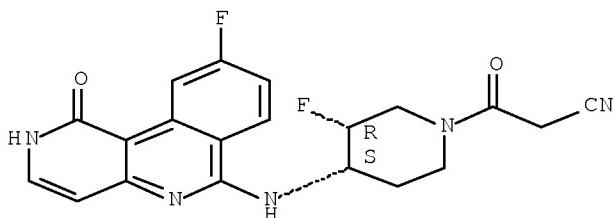
FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 23339 TO 27621  
PROJECTED ANSWERS: 2 TO 124

L4 2 SEA SSS SAM L3

=> D SCAN

L4 2 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN  
IN 1-Piperidinopropanenitrile, 3-fluoro-4-[(9-fluoro-1,2-dihydro-1-oxobenzo[c][1,6]naphthyridin-6-yl)amino]-β-oxo-, (3R,4S)-  
MF C20 H17 F2 N5 O2

Absolute stereochemistry.

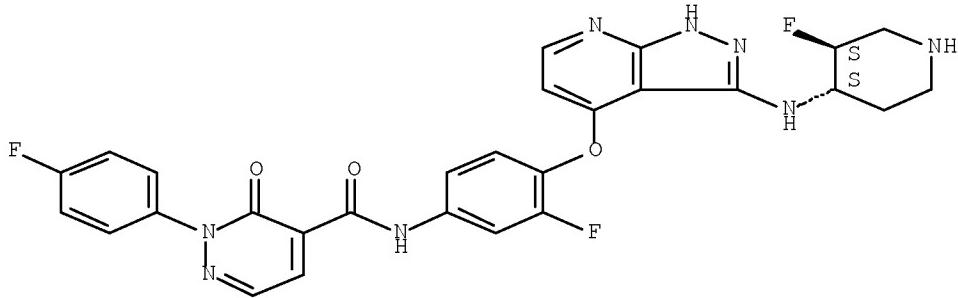


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L4 2 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN  
IN 4-Pyridazinecarboxamide, N-[3-fluoro-4-[[3-[(3R,4R)-3-fluoro-4-piperidinyl]amino]-1H-pyrazolo[3,4-b]pyridin-4-yl]oxy]phenyl]-2-(4-fluorophenyl)-2,3-dihydro-3-oxo-, rel-  
MF C28 H23 F3 N8 O3  
CI COM

Relative stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

ALL ANSWERS HAVE BEEN SCANNED

=> S SSS FULL L3  
 FULL SEARCH INITIATED 15:32:39 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 25369 TO ITERATE

100.0% PROCESSED 25369 ITERATIONS 104 ANSWERS  
 SEARCH TIME: 00.00.01

L5 104 SEA SSS FUL L3

=> FIL SAVE L5 TEMP NIGE10559153/A  
 'SAVE' IS NOT A VALID FILE NAME  
 Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files  
 that are available. If you have requested multiple files, you can  
 specify a corrected file name or you can enter "IGNORE" to continue  
 accessing the remaining file names entered.  
 ENTER A FILE NAME OR (IGNORE):END

=> SAVE L5 TEMP NIGE10559153/A  
 ANSWER SET L5 HAS BEEN SAVED AS 'NIGE10559153/A'

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	182.04	182.25

FILE 'CAPLUS' ENTERED AT 15:33:52 ON 17 NOV 2008  
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FILE COVERS 1907 - 17 Nov 2008 VOL 149 ISS 21  
FILE LAST UPDATED: 16 Nov 2008 (20081116/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

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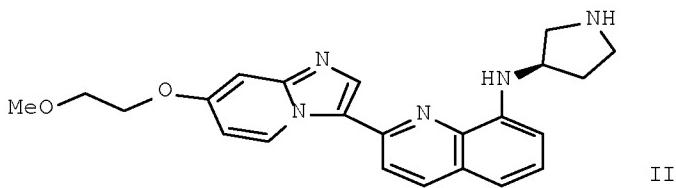
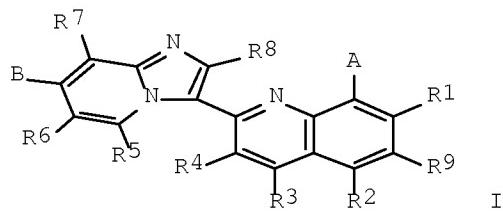
=> S L5  
L6                    7 L5

=> D IBIB ABS HITSTR L6 1-7

L6 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2008:1248220 CAPLUS Full-text  
DOCUMENT NUMBER: 149:471456  
TITLE: Preparation of imidazo[1,2-a]pyridine compounds as receptor tyrosine kinase inhibitors  
INVENTOR(S): Allen, Shelley; Greschuk, Julie Marie; Kallan, Nicholas C.; Marmsaeter, Fredrik P.; Munson, Mark C.; Rizzi, James P.; Robinson, John E.; Schlachter, Stephen T.; Topalov, George T.; Zhao, Qian; Lyssikatos, Joseph P.  
PATENT ASSIGNEE(S): Array Biopharma Inc., USA  
SOURCE: PCT Int. Appl., 89pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008124323	A1	20081016	WO 2008-US58395	20080327
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.: US 2007-909857P P 20070403  
GI



**AB** The title compds. with general formula I [wherein A = (un)substituted N- or O-linked heterocyclic ring; B = H, CN, OH, (un)substituted (hetero)aryl, etc.; R1-R4 = independently H, F, Cl, CN, etc.; R9 = H, F, Cl, or Me; R5-R8 = independently H, F, Cl, CN, or Me] or pharmaceutically acceptable salts thereof were prepared as tyrosine kinase receptor inhibitors useful in the treatment of diseases mediated by class 3 or class 5 tyrosine kinases receptors. Particularly, compds. of this invention have been found to be inhibitors of Pim-1. For example, compound II was prepared in a multi-step synthesis. All the invention compds. were evaluated for their tyrosine kinase receptor inhibitory activity. From the assay, it was determined that II and all other tested compds. exhibited the IC<sub>50</sub> values of < 10 μM against cellular PDGFR.

**IT** 1070896-26-2P

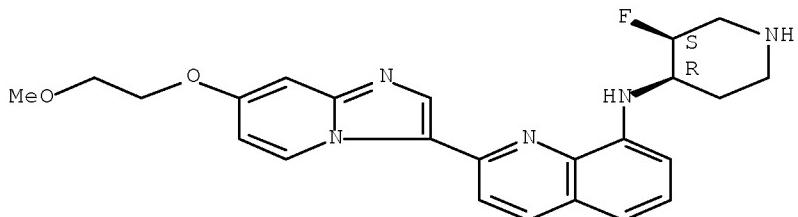
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of imidazo[1,2-a]pyridine compds. as receptor tyrosine kinase inhibitors)

**RN** 1070896-26-2 CAPLUS

**CN** INDEX NAME NOT YET ASSIGNED

Relative stereochemistry.



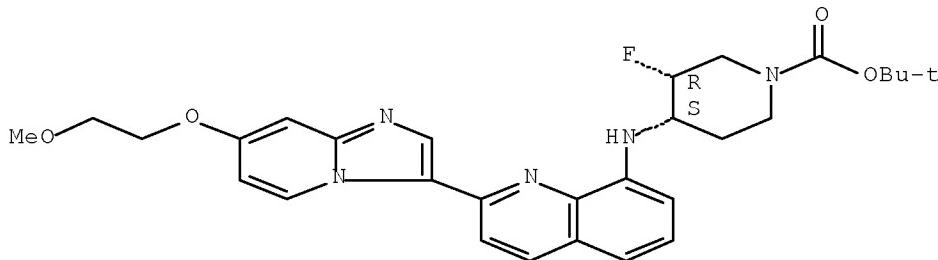
**IT** 1070896-86-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of imidazo[1,2-a]pyridine compds. as receptor tyrosine kinase

inhibitors)  
RN 1070896-86-4 CAPLUS  
CN INDEX NAME NOT YET ASSIGNED

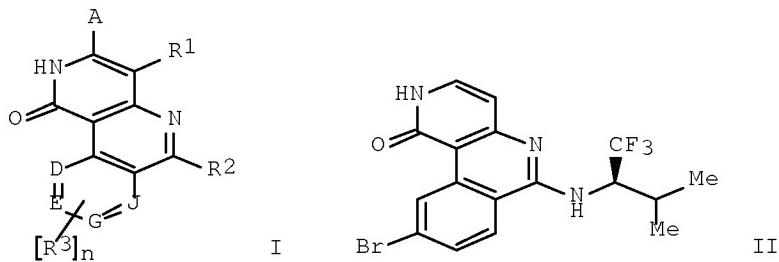
Relative stereochemistry.



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2008:1122672 CAPLUS Full-text  
DOCUMENT NUMBER: 149:378706  
TITLE: Preparation of benzonaphthyridinones as inhibitors of janus kinases and/or 3-phosphoinositide-dependent protein kinase-1  
INVENTOR(S): Kozina, Ekaterina; Dinsmore, Christopher; Siu, Tony; Young, Jonathan; Northrup, Alan; Altman, Michael; Keenan, Kevin A.; Guerin, David J.; Jung, Joon O.; MacCoss, Rachel N.; Kattar, Solomon  
PATENT ASSIGNEE(S): Merck & Co., Inc., USA  
SOURCE: PCT Int. Appl., 248pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008112217	A1	20080918	WO 2008-US3206	20080310
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRIORITY APPLN. INFO.:			US 2007-906753P	P 20070313
OTHER SOURCE(S):		MARPAT 149:378706		
GI				



AB The title compds. I [D, E, G, J = CH, N or NO; R1 = H, alkyl, cycloalkyl, etc.; R2 = NR5R6, SR5, OR5, etc.; R3 = H, alkyl, cycloalkyl, etc.; R4 = H, alkyl; R5 = H, alkyl, cycloalkyl; A = H, alkyl, cycloalkyl, etc.; n = 0-3] that inhibit JAK2 tyrosine kinase and/or PDK1, were prepared and formulated. E.g., a multi-step synthesis of (1R)-II, starting from 4-bromobenzoyl chloride and diisopropylamine, was given. Compds. I are potent inhibitors of recombinant purified JAK2 kinase activity with an IC50 of approx. 0.1 nM - 20  $\mu$ M. The invention also provides for compns. comprising compds. I and methods of inhibiting JAK2 tyrosine kinase activity and/or PDK1 kinase inhibitory activity by administering the compound I to a patient in need of treatment or prevention of myeloproliferative disorders or cancer.

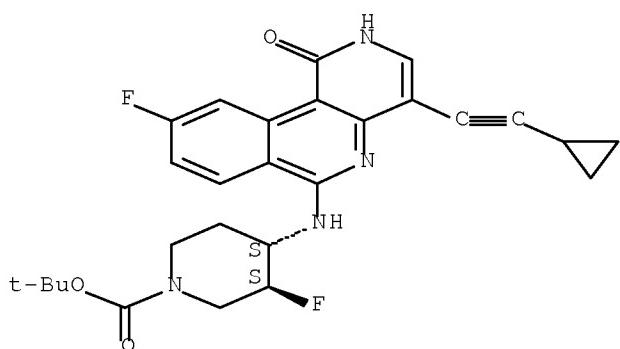
IT 1058128-21-4P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(preparation of benzonaphthyridinones as inhibitors of janus kinases and/or 3-phosphoinositide-dependent protein kinase-1)

RN 1058128-21-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[4-(2-cyclopropylethynyl)-9-fluoro-1,2-dihydro-1-oxobenzo[c][1,6]naphthyridin-6-yl]amino]-3-fluoro-, 1,1-dimethylethyl ester, (3R,4R)-rel- (CA INDEX NAME)

Relative stereochemistry.



IT 1058125-85-1P 1058126-35-4P 1058126-36-5P

1058126-37-6P 1058127-16-4P 1058128-22-5P

1058128-23-6P

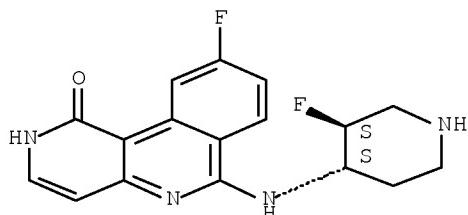
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of benzonaphthyridinones as inhibitors of janus kinases and/or 3-phosphoinositide-dependent protein kinase-1)

RN 1058125-85-1 CAPLUS

CN Benzo[c][1,6]naphthyridin-1(2H)-one,  
9-fluoro-6-[(3R,4R)-3-fluoro-4-piperidinyl]amino]-, rel- (CA INDEX NAME)

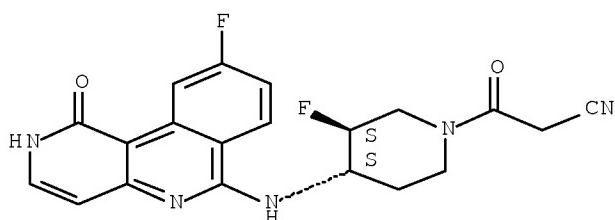
Relative stereochemistry.



RN 1058126-35-4 CAPLUS

CN 1-Piperidinepropanenitrile, 3-fluoro-4-[(9-fluoro-1,2-dihydro-1-oxobenzo[c][1,6]naphthyridin-6-yl)amino]-β-oxo-, (3S,4S)- (CA INDEX NAME)

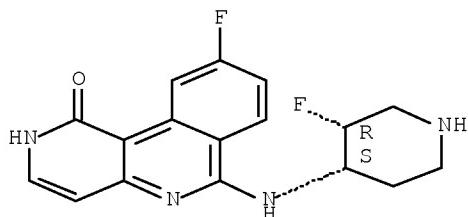
Absolute stereochemistry.



RN 1058126-36-5 CAPLUS

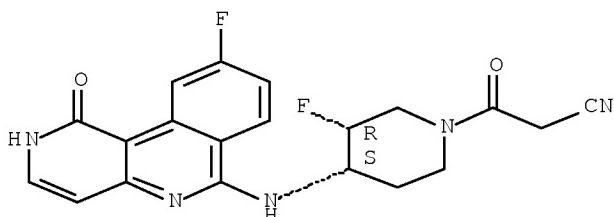
CN Benzo[c][1,6]naphthyridin-1(2H)-one,  
9-fluoro-6-[(3R,4S)-3-fluoro-4-piperidinyl]amino]- (CA INDEX NAME)

Absolute stereochemistry.



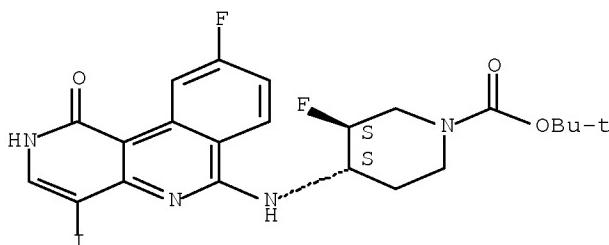
RN 1058126-37-6 CAPLUS  
CN 1-Piperidinopropanenitrile, 3-fluoro-4-[(9-fluoro-1,2-dihydro-1-oxobenzo[c][1,6]naphthyridin-6-yl)amino]-β-oxo-, (3R,4S)- (CA INDEX NAME)

Absolute stereochemistry.



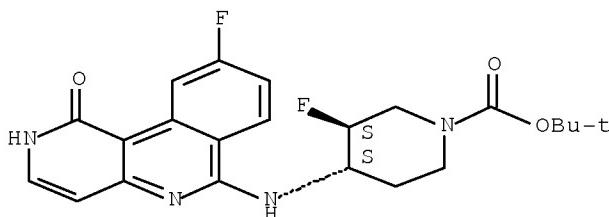
RN 1058127-16-4 CAPLUS  
CN 1-Piperidinecarboxylic acid, 3-fluoro-4-[(9-fluoro-1,2-dihydro-4-iodo-1-oxobenzo[c][1,6]naphthyridin-6-yl)amino]-, 1,1-dimethylethyl ester, (3R,4R)-rel- (CA INDEX NAME)

Relative stereochemistry.



RN 1058128-22-5 CAPLUS  
CN 1-Piperidinecarboxylic acid, 3-fluoro-4-[(9-fluoro-1,2-dihydro-1-oxobenzo[c][1,6]naphthyridin-6-yl)amino]-, 1,1-dimethylethyl ester, (3R,4R)-rel- (CA INDEX NAME)

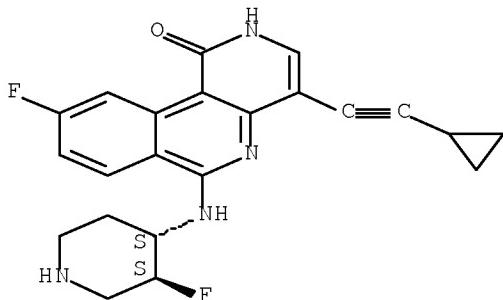
Relative stereochemistry.



RN 1058128-23-6 CAPLUS  
CN Benzo[c][1,6]naphthyridin-1(2H)-one,

4-(2-cyclopropylethyynyl)-9-fluoro-6-[(3R,4R)-3-fluoro-4-piperidinyl]amino]-, rel- (CA INDEX NAME)

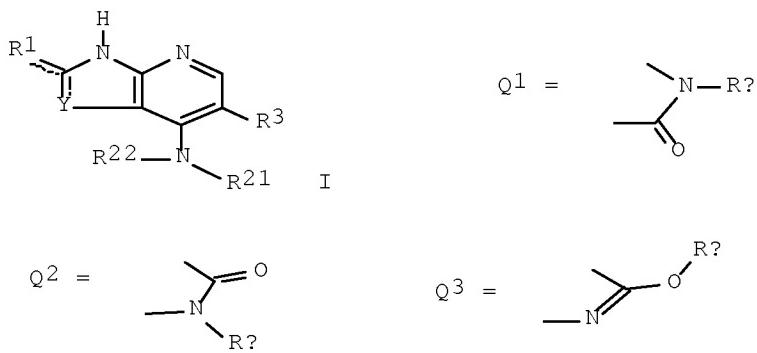
Relative stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2008:853971 CAPLUS Full-text  
DOCUMENT NUMBER: 149:176332  
TITLE: Preparation of fused pyridine derivatives as JAK3 inhibitors for treatment of autoimmune disease, leukemia, etc.  
INVENTOR(S): Shirakami, Shohei; Inoue, Takayuki; Mukoyoshi, Koichiro; Nakajima, Yutaka; Usuda, Hiroyuki; Hamaguchi, Hisao; Higashi, Yasuyuki; Hatanaka, Keiko  
PATENT ASSIGNEE(S): Astellas Pharma Inc., Japan  
SOURCE: PCT Int. Appl., 130pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008084861	A1	20080717	WO 2008-JP50300	20080111
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRIORITY APPLN. INFO.:			JP 2007-5236	A 20070112
OTHER SOURCE(S):		MARPAT 149:176332		
GI				



AB The title compds. I [R1 = H, oxo; R3 = (alkyl-substituted) carbamoyl, (alkyl-substituted) oxadiazolyl; R21 = H; or R21 may together with R3 form Q1, Q2, Q3, etc.; Ra = H, alkyl; Rb = H, alkyl; Rc = H, alkyl, alkyl-O-alkyl; R22 = (un)substituted 5- to 7-membered N-containing heterocycloalkyl, cycloalkyl, benzyl, etc.; Y = N, CH, CH2; the dotted line together with the solid line indicates a single or double bond : when one set of dotted line and solid line indicates a single bond, the other set of dotted line and solid line indicates a double bond] are prepared Thus, 4-([1-(5-cyanopyrimidin-2-yl)piperidin-4-yl]amino)-1H-pyrrolo[2,3-b]pyridine-5-carboxamide was prepared from 4-([1-(5-bromopyrimidin-2-yl)piperidin-4-yl]amino)-1H-pyrrolo[2,3-b]pyridine-5-carboxamide. In an assay for JAK3 inhibiting activity, compds. of this invention showed IC<sub>50</sub> values of 0.3 nM to 10 nM.

IT 1039740-35-6P 1039740-37-8P 1039740-39-0P  
1039740-40-3P 1039740-41-4P 1039740-42-5P

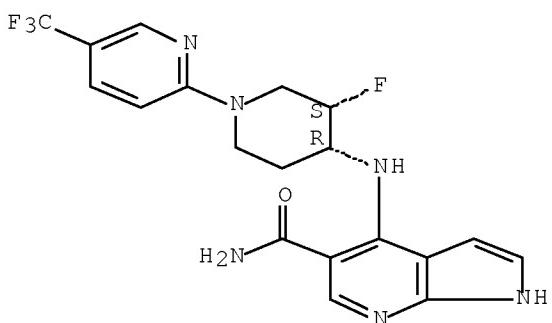
RL: PAC (Pharmacological activity); PRPH (Prophetic); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of fused pyridine derivs. as JAK3 inhibitors)

RN 1039740-35-6 CAPLUS

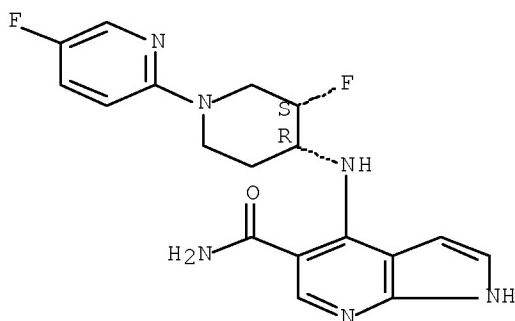
CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxamide,  
4-[(3R,4S)-3-fluoro-1-[5-(trifluoromethyl)-2-pyridinyl]-4-piperidinyl]amino]-, rel- (CA INDEX NAME)

Relative stereochemistry.



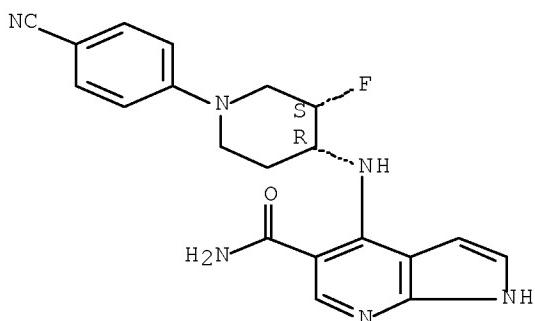
RN 1039740-37-8 CAPLUS  
CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxamide,  
4-[(3R,4S)-3-fluoro-1-(5-fluoro-2-pyridinyl)-4-piperidinyl]amino]-, rel-  
(CA INDEX NAME)

Relative stereochemistry.



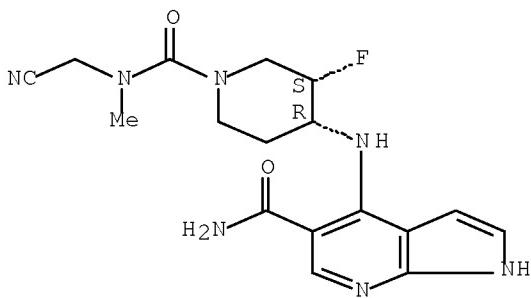
RN 1039740-39-0 CAPLUS  
CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxamide,  
4-[(3R,4S)-1-(4-cyanophenyl)-3-fluoro-4-piperidinyl]amino]-, rel- (CA  
INDEX NAME)

Relative stereochemistry.



RN 1039740-40-3 CAPLUS  
CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxamide,  
4-[(3R,4S)-1-[(cyanomethyl)methylamino]carbonyl]-3-fluoro-4-  
piperidinyl]amino]-, rel- (CA INDEX NAME)

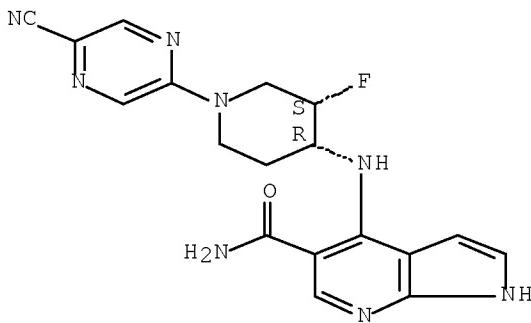
Relative stereochemistry.



RN 1039740-41-4 CAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxamide,  
4-[(3R,4S)-1-(5-cyano-2-pyrazinyl)-3-fluoro-4-piperidinyl]amino]-, rel-  
(CA INDEX NAME)

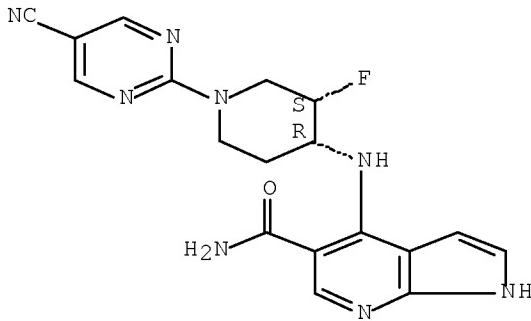
Relative stereochemistry.



RN 1039740-42-5 CAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxamide,  
4-[(3R,4S)-1-(5-cyano-2-pyrimidinyl)-3-fluoro-4-piperidinyl]amino]-, rel-  
(CA INDEX NAME)

Relative stereochemistry.



IT 1039738-45-8P 1039738-46-9P 1039738-50-5P  
1039738-53-8P 1039738-55-0P 1039738-57-2P  
1039738-60-7P 1039738-62-9P 1039738-64-1P  
1039738-79-8P 1039739-42-8P 1039739-84-8P  
1039739-90-6P 1039739-91-7P

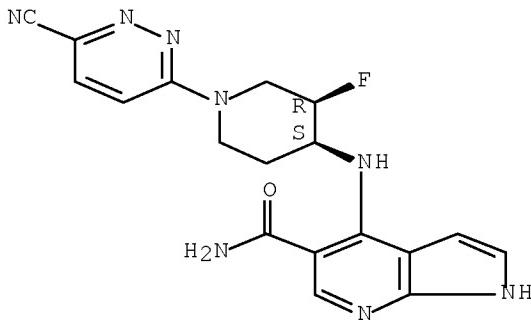
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of fused pyridine derivs. as JAK3 inhibitors)

RN 1039738-45-8 CAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxamide,  
4-[(3R,4S)-1-(6-cyano-3-pyridazinyl)-3-fluoro-4-piperidinyl]amino]- (CA INDEX NAME)

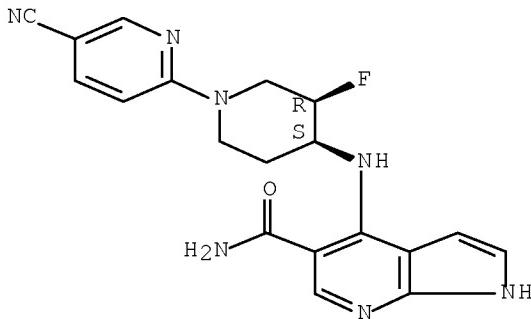
Absolute stereochemistry.



RN 1039738-46-9 CAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxamide,  
4-[(3R,4S)-1-(5-cyano-2-pyridinyl)-3-fluoro-4-piperidinyl]amino]- (CA INDEX NAME)

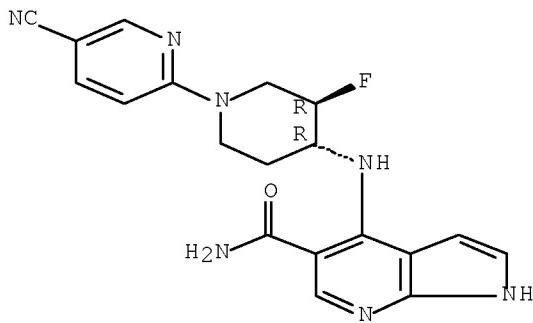
Absolute stereochemistry.



RN 1039738-50-5 CAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxamide,  
4-[(3R,4R)-1-(5-cyano-2-pyridinyl)-3-fluoro-4-piperidinyl]amino]- (CA INDEX NAME)

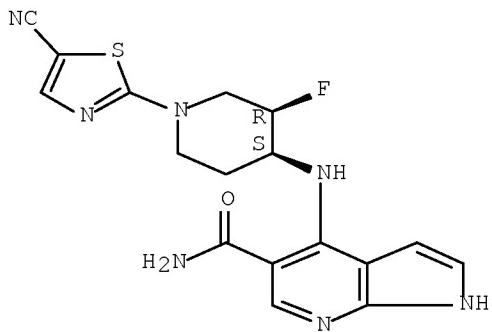
Absolute stereochemistry.



RN 1039738-53-8 CAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxamide,  
4-[(3R,4S)-1-(5-cyano-2-thiazolyl)-3-fluoro-4-piperidinyl]amino]- (CA  
INDEX NAME)

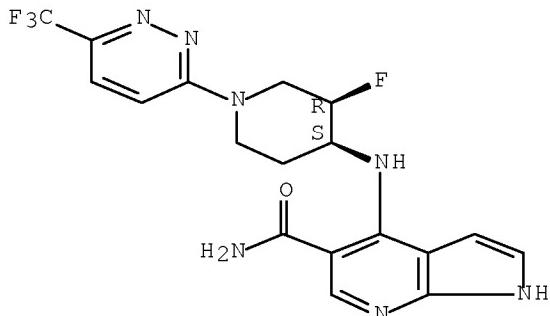
Absolute stereochemistry.



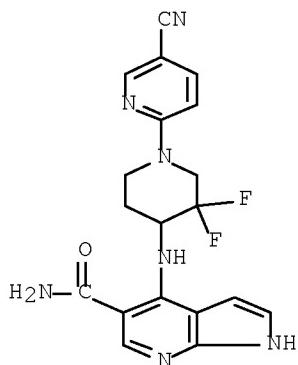
RN 1039738-55-0 CAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxamide,  
4-[(3R,4S)-3-fluoro-1-[6-(trifluoromethyl)-3-pyridazinyl]-4-piperidinyl]amino]- (CA INDEX NAME)

Absolute stereochemistry.

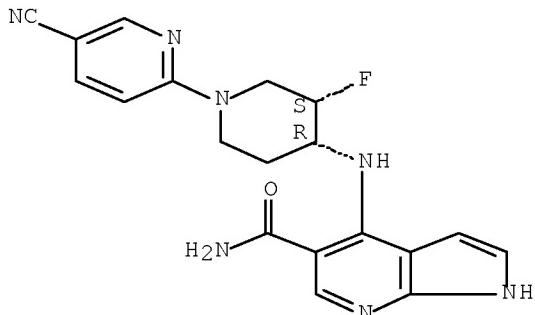


RN 1039738-57-2 CAPLUS  
CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxamide,  
4-[(1-(5-cyano-2-pyridinyl)-3,3-difluoro-4-piperidinyl)amino]- (CA INDEX  
NAME)



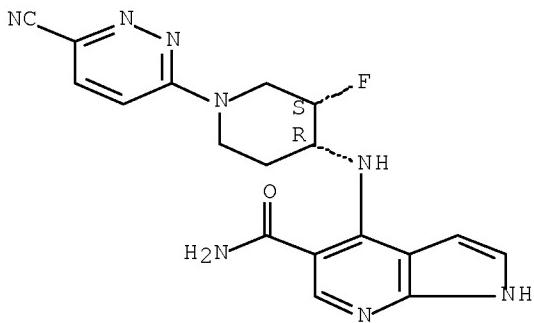
RN 1039738-60-7 CAPLUS  
CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxamide,  
4-[(3S,4R)-1-(5-cyano-2-pyridinyl)-3-fluoro-4-piperidinyl]amino]- (CA  
INDEX NAME)

Absolute stereochemistry.



RN 1039738-62-9 CAPLUS  
CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxamide,  
4-[(3S,4R)-1-(6-cyano-3-pyridazinyl)-3-fluoro-4-piperidinyl]amino]- (CA  
INDEX NAME)

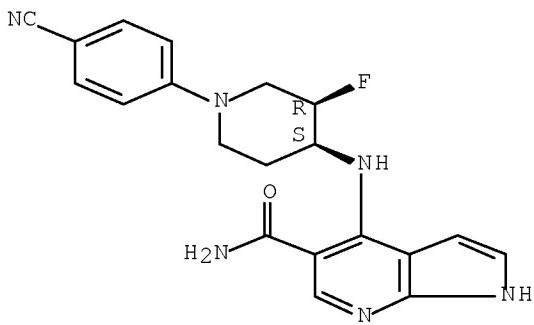
Absolute stereochemistry.



RN 1039738-64-1 CAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxamide,  
4-[(3R,4S)-1-(4-cyanophenyl)-3-fluoro-4-piperidinyl]amino]- (CA INDEX  
NAME)

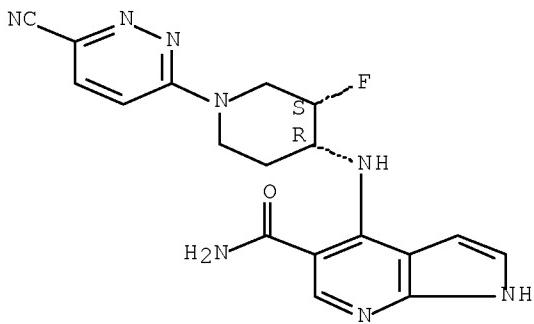
Absolute stereochemistry.



RN 1039738-79-8 CAPLUS

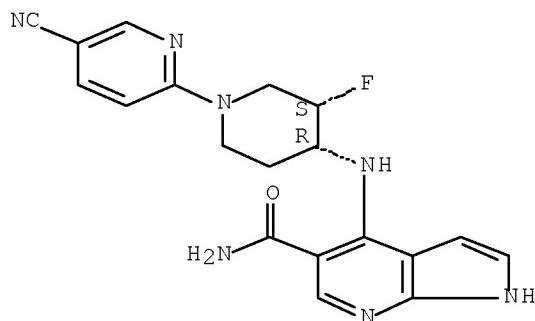
CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxamide,  
4-[(3R,4S)-1-(6-cyano-3-pyridazinyl)-3-fluoro-4-piperidinyl]amino]-, rel-  
(CA INDEX NAME)

Relative stereochemistry.



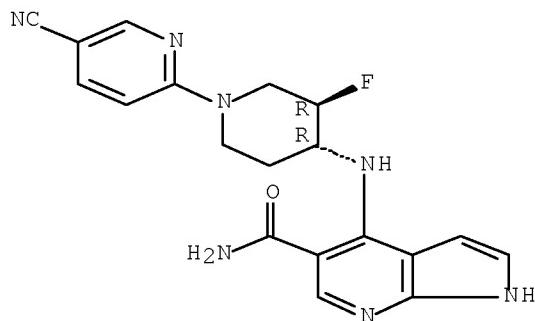
RN 1039739-42-8 CAPLUS  
CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxamide,  
4-[(3R,4S)-1-(5-cyano-2-pyridinyl)-3-fluoro-4-piperidinyl]amino]-, rel-  
(CA INDEX NAME)

Relative stereochemistry.



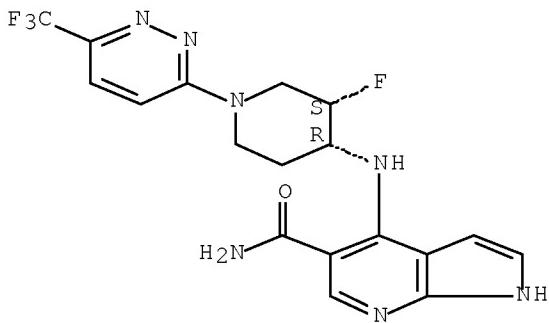
RN 1039739-84-8 CAPLUS  
CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxamide,  
4-[(3R,4R)-1-(5-cyano-2-pyridinyl)-3-fluoro-4-piperidinyl]amino]-, rel-  
(CA INDEX NAME)

Relative stereochemistry.



RN 1039739-90-6 CAPLUS  
CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxamide,  
4-[(3R,4S)-3-fluoro-1-[6-(trifluoromethyl)-3-pyridazinyl]-4-piperidinyl]amino]-, rel- (CA INDEX NAME)

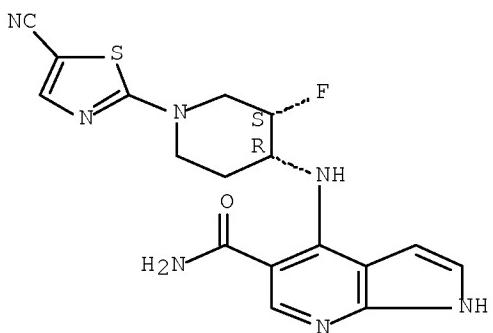
Relative stereochemistry.



RN 1039739-91-7 CAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxamide,  
4-[(3R,4S)-1-(5-cyano-2-thiazolyl)-3-fluoro-4-piperidinyl]amino]-, rel-  
(CA INDEX NAME)

Relative stereochemistry.



IT 1039738-35-6P 1039740-43-6P 1039740-45-8P  
1039740-46-9P 1039740-48-1P 1039740-49-2P  
1039740-50-5P 1039740-52-7P 1039740-54-9P  
1039740-75-4P 1039740-76-5P 1039740-79-8P  
1039741-09-7P 1039741-18-8P 1039741-23-5P  
1039741-25-7P 1039741-29-1P

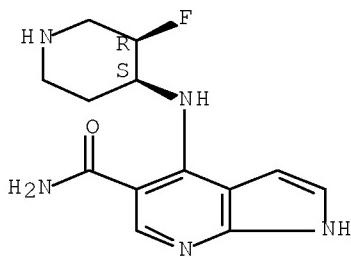
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

(preparation of fused pyridine derivs. as JAK3 inhibitors)

RN 1039738-35-6 CAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxamide,  
4-[(3R,4S)-3-fluoro-4-piperidinyl]amino]-, rel- (CA INDEX NAME)

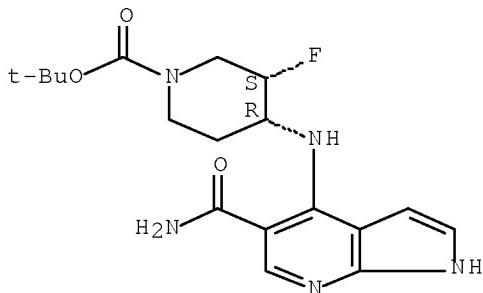
Relative stereochemistry.



RN 1039740-43-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(5-(aminocarbonyl)-1H-pyrrolo[2,3-b]pyridin-4-yl)amino]-3-fluoro-, 1,1-dimethylethyl ester, (3R,4S)-rel-(CA INDEX NAME)

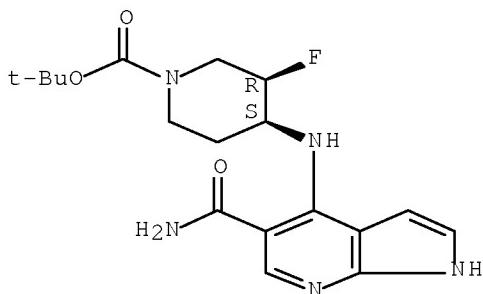
Relative stereochemistry.



RN 1039740-45-8 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(5-(aminocarbonyl)-1H-pyrrolo[2,3-b]pyridin-4-yl)amino]-3-fluoro-, 1,1-dimethylethyl ester, (3R,4S)- (CA INDEX NAME)

Absolute stereochemistry.

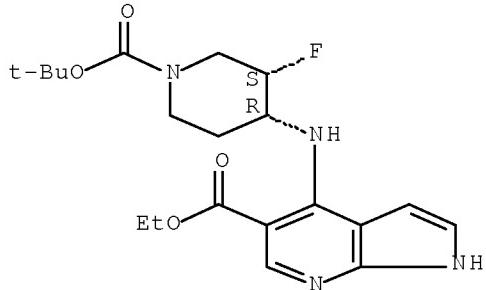


RN 1039740-46-9 CAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxylic acid, 4-[(3R,4S)-1-[(1,1-dimethylethoxy)carbonyl]-3-fluoro-4-piperidinyl]amino]-

, ethyl ester, rel- (CA INDEX NAME)

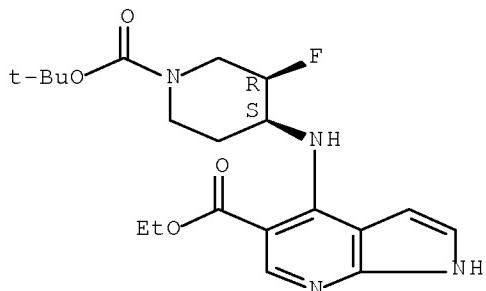
Relative stereochemistry.



RN 1039740-48-1 CAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxylic acid,  
4-[(3R,4S)-1-[(1,1-dimethylethoxy)carbonyl]-3-fluoro-4-piperidinyl]amino]-  
, ethyl ester (CA INDEX NAME)

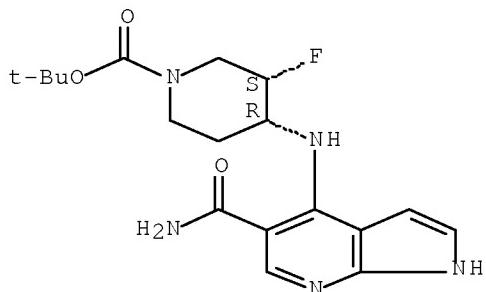
Absolute stereochemistry.



RN 1039740-49-2 CAPLUS

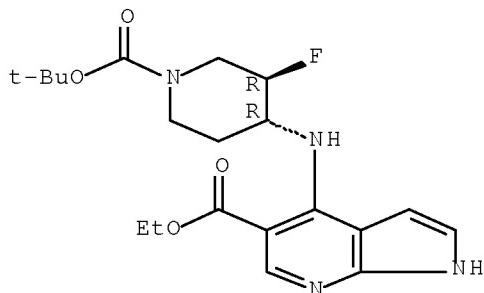
CN 1-Piperidinecarboxylic acid, 4-[(5-(aminocarbonyl)-1H-pyrrolo[2,3-b]pyridin-4-yl)amino]-3-fluoro-, 1,1-dimethylethyl ester, (3S,4R)- (CA INDEX NAME)

Absolute stereochemistry.



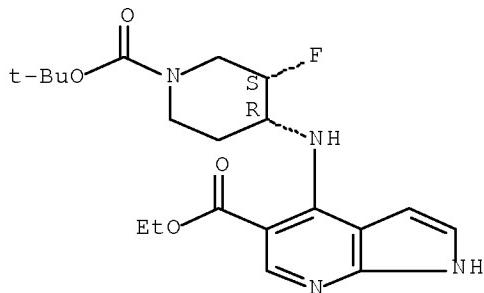
RN 1039740-50-5 CAPLUS  
CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxylic acid,  
4-[(3R,4R)-1-[(1,1-dimethylethoxy)carbonyl]-3-fluoro-4-piperidinyl]amino]-  
, ethyl ester, rel- (CA INDEX NAME)

Relative stereochemistry.

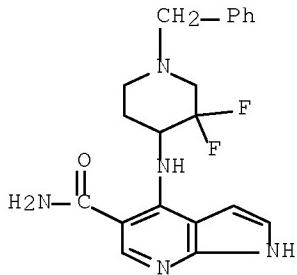


RN 1039740-52-7 CAPLUS  
CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxylic acid,  
4-[(3S,4R)-1-[(1,1-dimethylethoxy)carbonyl]-3-fluoro-4-piperidinyl]amino]-  
, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.



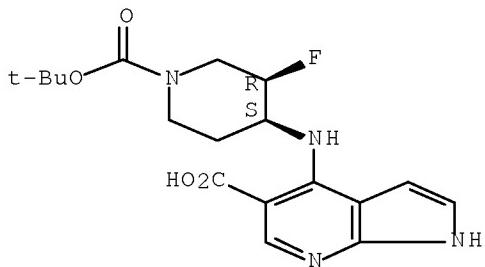
RN 1039740-54-9 CAPLUS  
CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxamide,  
4-[(3,3-difluoro-1-(phenylmethyl)-4-piperidinyl]amino]- (CA INDEX NAME)



RN 1039740-75-4 CAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxylic acid,  
4-[(3R,4S)-1-[(1,1-dimethylethoxy)carbonyl]-3-fluoro-4-piperidinyl]amino]-  
(CA INDEX NAME)

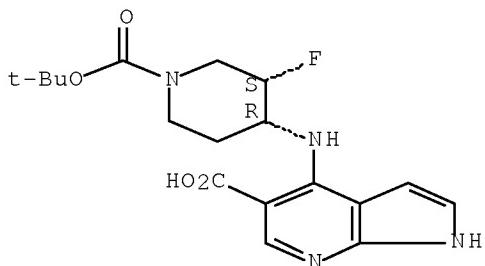
Absolute stereochemistry.



RN 1039740-76-5 CAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxylic acid,  
4-[(3S,4R)-1-[(1,1-dimethylethoxy)carbonyl]-3-fluoro-4-piperidinyl]amino]-  
(CA INDEX NAME)

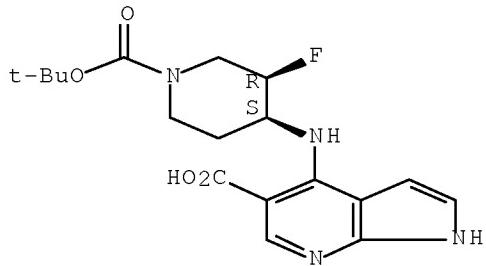
Absolute stereochemistry.



RN 1039740-78-9 CAPLUS

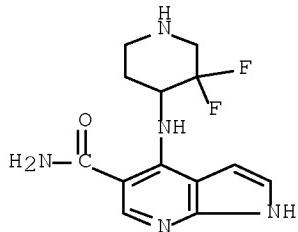
CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxylic acid,  
4-[(3R,4S)-1-[(1,1-dimethylethoxy)carbonyl]-3-fluoro-4-piperidinyl]amino]-  
, rel- (CA INDEX NAME)

Relative stereochemistry.



RN 1039741-09-7 CAPLUS

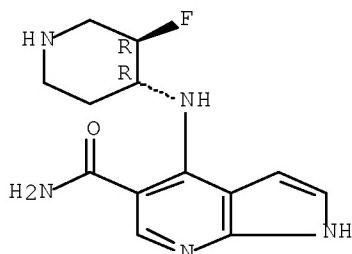
CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxamide,  
4-[(3,3-difluoro-4-piperidinyl)amino]- (CA INDEX NAME)



RN 1039741-18-8 CAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxamide,  
4-[(3R,4R)-3-fluoro-4-piperidinyl]amino]-, hydrochloride (1:2), rel- (CA INDEX NAME)

Relative stereochemistry.

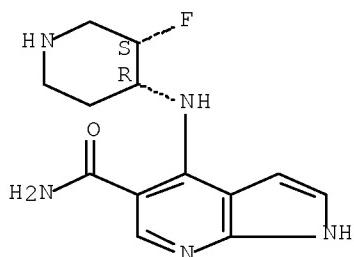


●2 HCl

RN 1039741-23-5 CAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxamide,  
4-[(3S,4R)-3-fluoro-4-piperidinyl]amino]-, hydrochloride (1:2) (CA INDEX NAME)

Absolute stereochemistry.

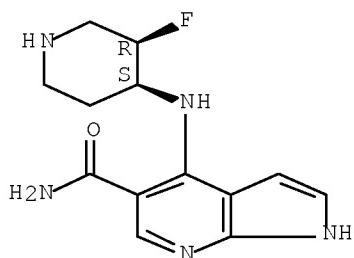


●2 HCl

RN 1039741-25-7 CAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxamide,  
4-[(3R,4S)-3-fluoro-4-piperidinyl]amino-, hydrochloride (1:2) (CA INDEX  
NAME)

Absolute stereochemistry.

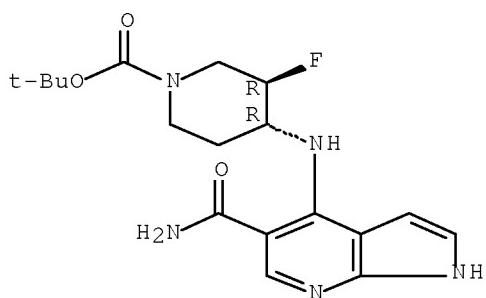


●2 HCl

RN 1039741-29-1 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(5-(aminocarbonyl)-1H-pyrrolo[2,3-b]pyridin-4-yl]amino]-3-fluoro-, 1,1-dimethylethyl ester, (3R,4R)-rel-  
(CA INDEX NAME)

Relative stereochemistry.

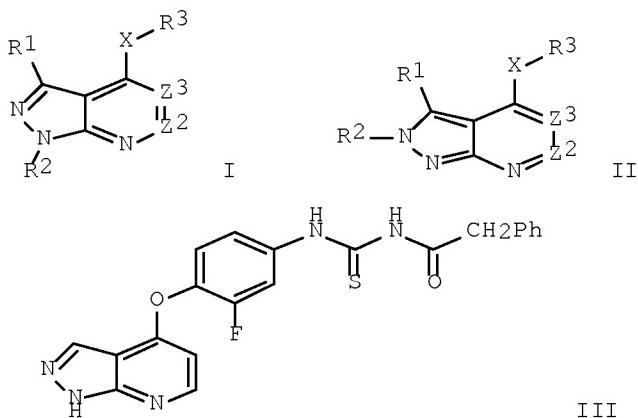


REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2007:1028755 CAPLUS Full-text  
DOCUMENT NUMBER: 147:365493  
TITLE: Heterobicyclic pyrazole compounds as Met tyrosine kinase inhibitors and their preparation and use  
INVENTOR(S): Blake, James F.; Boyd, Steven Armen; Cohen, Frederick; De Meese, Jason; Fong, Kin Chiu; Gaudino, John J.; Kaplan, Tomas; Marlow, Allison L.; Seo, Jeongbeob; Thomas, Allen A.; Tian, Hongqi; Young, Wendy B.  
PATENT ASSIGNEE(S): Array Biopharma Inc., USA; Genentech, Inc.  
SOURCE: PCT Int. Appl., 273 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007103308	A2	20070913	WO 2007-US5583	20070306
WO 2007103308	A3	20080207		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
AU 2007224020	A1	20070913	AU 2007-224020	20070306
US 20070238726	A1	20071011	US 2007-714342	20070306
PRIORITY APPLN. INFO.:			US 2006-779805P	P 20060307
			US 2006-874832P	P 20061214
			WO 2007-US5583	W 20070306

OTHER SOURCE(S): MARPAT 147:365493  
GI



AB The invention is related to the preparation of I and II [X = O, S, NH and derivs.; Z2, Z3 = independently CH and derivs., N, wherein none or one of Z2, and Z3 = N; R1 = H, (un)substituted alk(en/yn)yl, (hetero)aryl, etc.; R2 = H, CF<sub>3</sub>, CN, SH and derivs., SO<sub>2</sub>NH<sub>2</sub> and derivs., etc.; R3 = (un)substituted carbocyclyl, heterocyclyl, (hetero)/aryl] and their pharmaceutically acceptable salts which are useful for inhibiting receptor tyrosine kinases and for treating disorders mediated thereby. Methods of using compds. I and II and their stereoisomers, geometric isomers, tautomers, solvates, metabolites and pharmaceutically acceptable salts, for in vitro, in situ, and in vivo diagnosis, prevention or treatment of such disorders in mammalian cells, or associated pathol. conditions are disclosed. Thus, pyrazolopyridine III was prepared by a multi-step synthesis via 1-(4-methoxybenzyl)-1H-pyrazolo[3,4-b]pyridin-4-ol intermediate which was obtained from 1-(4-methoxybenzyl)-1H-pyrazol-5-amine and Meldrum's acid. Certain I and II had IC<sub>50</sub>'s < 1 μM in a c-Met enzyme assay.

IT 949559-96-0P 949559-99-3P 949560-05-8P  
949560-09-2P 949560-33-2P 949560-35-4P

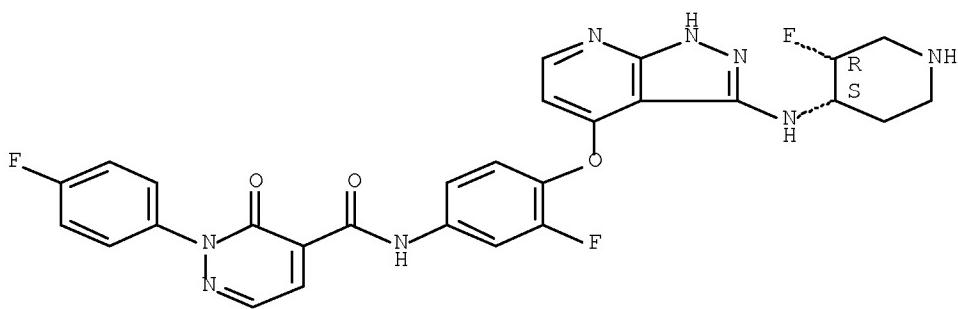
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of heterobicyclic pyrazole compds. as Met tyrosine kinase inhibitors useful in the treatment of diseases)

RN 949559-96-0 CAPLUS

CN 4-Pyridazinecarboxamide, N-[3-fluoro-4-[[3-[(3R,4S)-3-fluoro-4-piperidinyl]amino]-1H-pyrazolo[3,4-b]pyridin-4-yl]oxy]phenyl]-2-(4-fluorophenyl)-2,3-dihydro-3-oxo-, hydrochloride (1:2), rel- (CA INDEX NAME)

Relative stereochemistry.

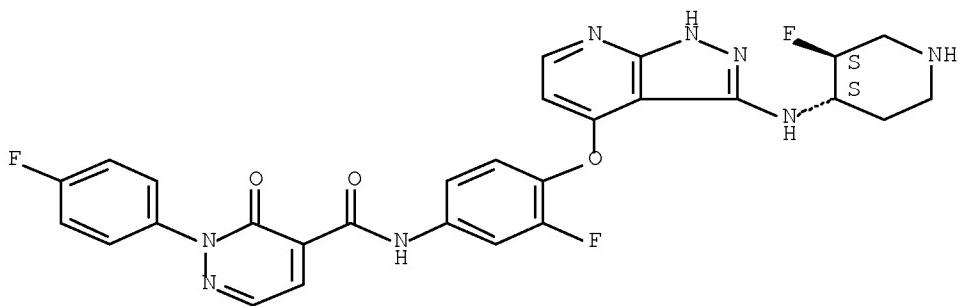


●2 HCl

RN 949559-99-3 CAPLUS

CN 4-Pyridazinecarboxamide, N-[3-fluoro-4-[[3-[(3R,4R)-3-fluoro-4-piperidinyl]amino]-1H-pyrazolo[3,4-b]pyridin-4-yl]oxy]phenyl]-2-(4-fluorophenyl)-2,3-dihydro-3-oxo-, hydrochloride (1:2), rel- (CA INDEX NAME)

Relative stereochemistry.

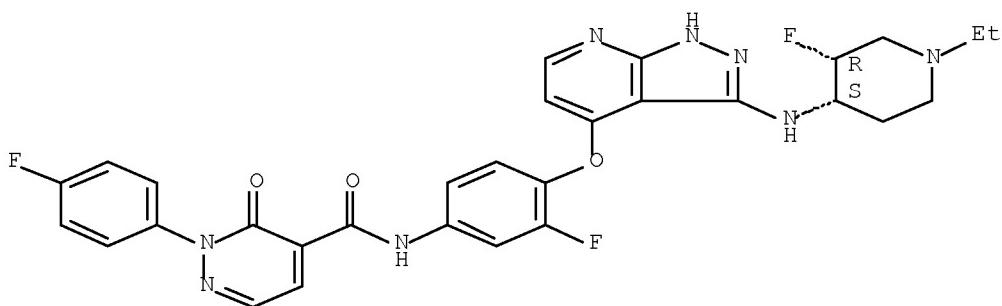


●2 HCl

RN 949560-05-8 CAPLUS

CN 4-Pyridazinecarboxamide, N-[4-[[3-[(3R,4S)-1-ethyl-3-fluoro-4-piperidinyl]amino]-1H-pyrazolo[3,4-b]pyridin-4-yl]oxy]-3-fluorophenyl]-2-(4-fluorophenyl)-2,3-dihydro-3-oxo-, hydrochloride (1:2), rel- (CA INDEX NAME)

Relative stereochemistry.

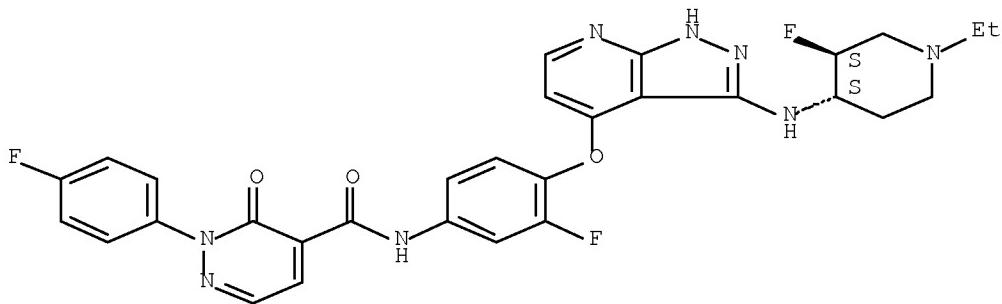


●2 HCl

RN 949560-09-2 CAPLUS

CN 4-Pyridazinecarboxamide, N-[4-[[3-[(3R,4R)-1-ethyl-3-fluoro-4-piperidinyl]amino]-1H-pyrazolo[3,4-b]pyridin-4-yl]oxy]-3-fluorophenyl]-2-(4-fluorophenyl)-2,3-dihydro-3-oxo-, hydrochloride (1:2), rel- (CA INDEX NAME)

Relative stereochemistry.

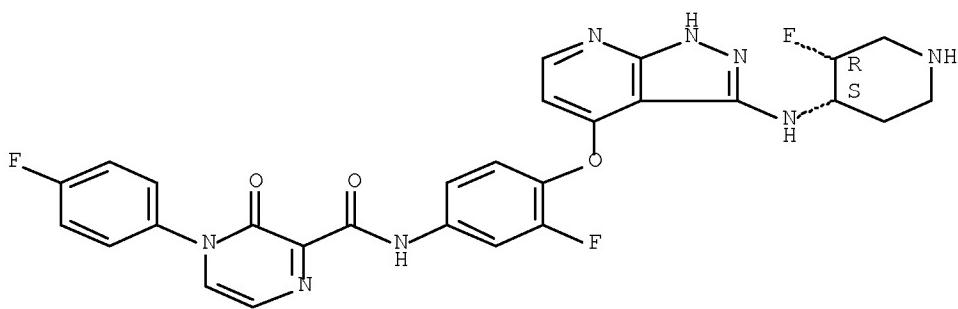


●2 HCl

RN 949560-33-2 CAPLUS

CN 2-Pyridazinecarboxamide, N-[3-fluoro-4-[[3-[(3R,4S)-3-fluoro-4-piperidinyl]amino]-1H-pyrazolo[3,4-b]pyridin-4-yl]oxy]phenyl]-4-(4-fluorophenyl)-3,4-dihydro-3-oxo-, hydrochloride (1:2), rel- (CA INDEX NAME)

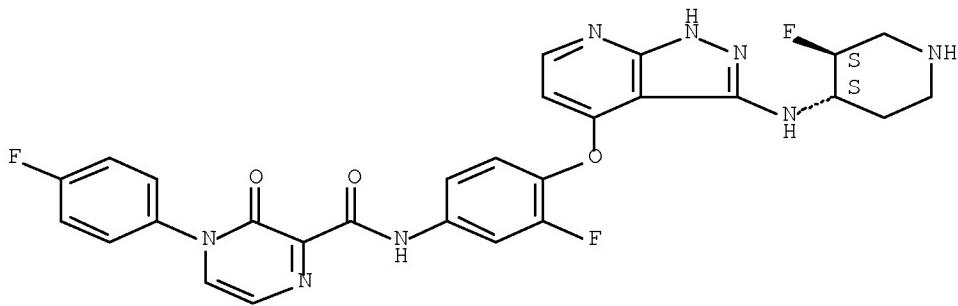
Relative stereochemistry.



2 HCl

RN 949560-35-4 CAPLUS  
CN 2-Pyrazinecarboxamide, N-[3-fluoro-4-[[3-[(3R,4R)-3-fluoro-4-piperidinyl]amino]-1H-pyrazolo[3,4-b]pyridin-4-yl]oxy]phenyl]-4-(4-fluorophenyl)-3,4-dihydro-3-oxo-, hydrochloride (1:2), rel- (CA INDEX NAME)

## Relative stereochemistry.



2 HCl

IT 949559-97-1P 949559-98-2P 949560-00-3P  
949560-01-4P 949560-07-0P 949560-08-3P  
949560-11-6P 949560-12-7P 949560-34-3P  
949560-36-5P

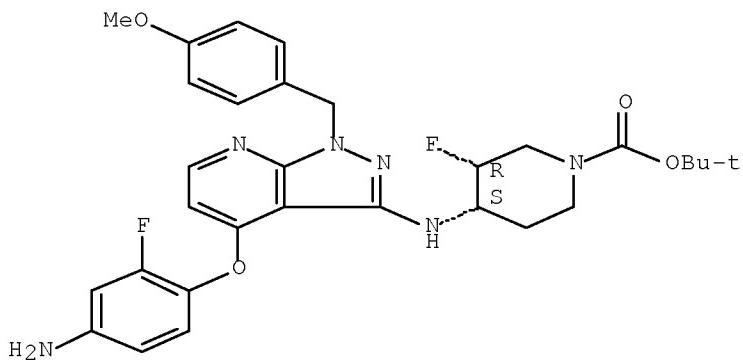
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of heterobicyclic pyrazole compds. as Met tyrosine kinase inhibitors useful in the treatment of diseases)

RN 949559-97-1 CAPLUS

CN 1-Piperidinocarboxylic acid, 4-[(4-(4-amino-2-fluorophenoxy)-1-[(4-methoxyphenyl)methyl]-1H-pyrazolo[3,4-b]pyridin-3-yl)amino]-3-fluoro-, 1,1-dimethylethyl ester, (3R, 4S)-rel- (CA INDEX NAME)

## Relative stereochemistry.

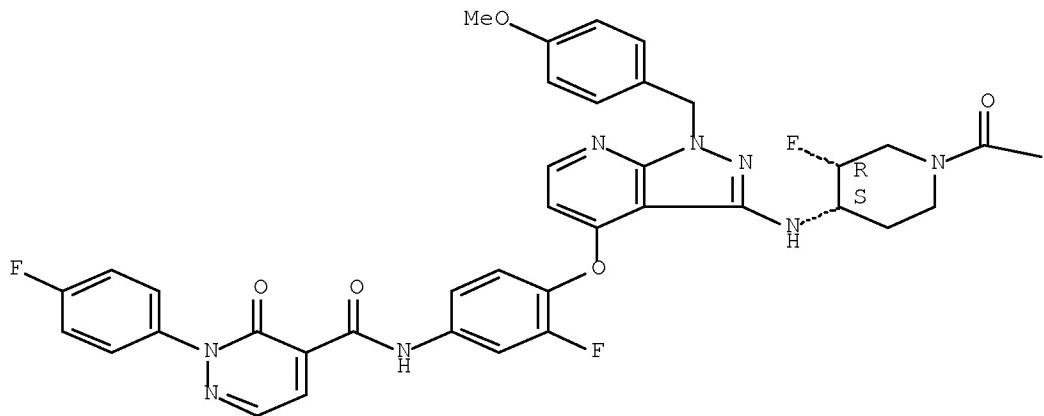


RN 949559-98-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 3-fluoro-4-[[4-[2-fluoro-4-[[2-(4-fluorophenyl)-2,3-dihydro-3-oxo-4-pyridazinyl]carbonyl]amino]phenoxy]-1-[(4-methoxyphenyl)methyl]-1H-pyrazolo[3,4-b]pyridin-3-yl]amino]-, 1,1-dimethylethyl ester, (3R,4S)-rel- (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



PAGE 1-B

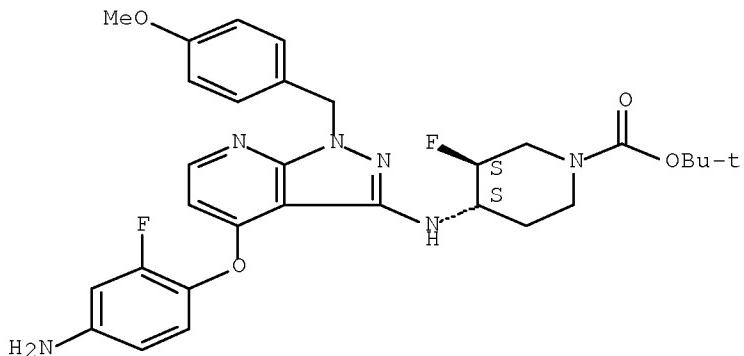
—OBu-t

RN 949560-00-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[4-(4-amino-2-fluorophenoxy)-1-[(4-

methoxyphenyl)methyl]-1H-pyrazolo[3,4-b]pyridin-3-yl]amino]-3-fluoro-,  
1,1-dimethylethyl ester, (3R,4R)-rel- (CA INDEX NAME)

Relative stereochemistry.

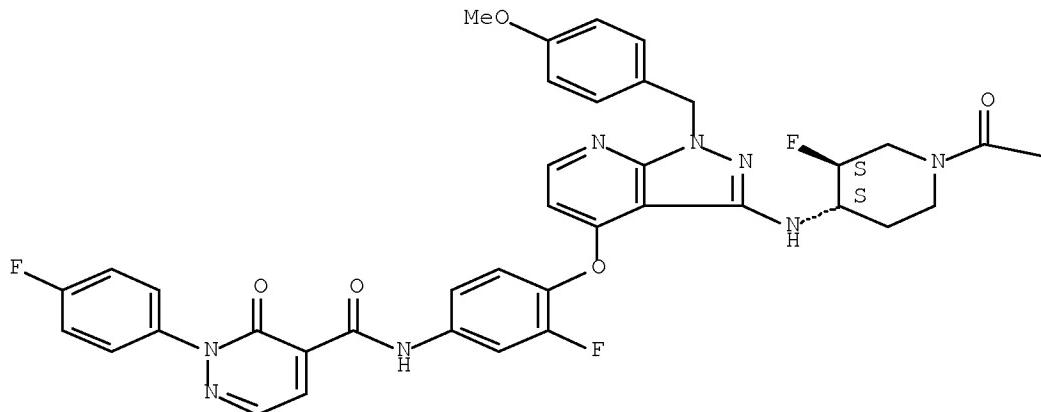


RN 949560-01-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 3-fluoro-4-[[4-[2-fluoro-4-[[2-(4-fluorophenyl)-2,3-dihydro-3-oxo-4-pyridazinyl]carbonyl]amino]phenoxy]-1-[(4-methoxyphenyl)methyl]-1H-pyrazolo[3,4-b]pyridin-3-yl]amino]-, 1,1-dimethylethyl ester, (3R,4R)-rel- (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



PAGE 1-B

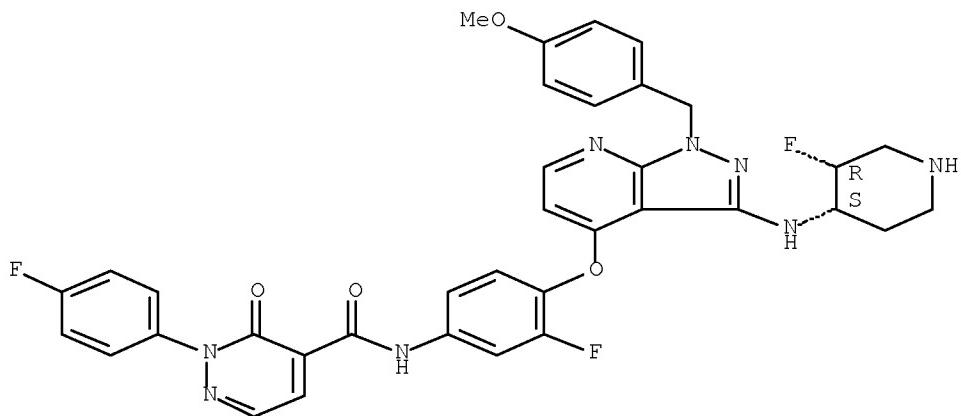
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RN 949560-07-0 CAPLUS  
CN 4-Pyridazinecarboxamide, N-[3-fluoro-4-[[3-[(3R,4S)-3-fluoro-4-piperidinyl]amino]-1-[(4-methoxyphenyl)methyl]-1H-pyrazolo[3,4-b]pyridin-4-yl]oxy]phenyl]-2-(4-fluorophenyl)-2,3-dihydro-3-oxo-, rel-, 2,2,2-trifluoroacetate (1:2) (CA INDEX NAME)

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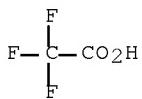
CRN 949560-06-9  
CMF C36 H31 F3 N8 O4

Relative stereochemistry.



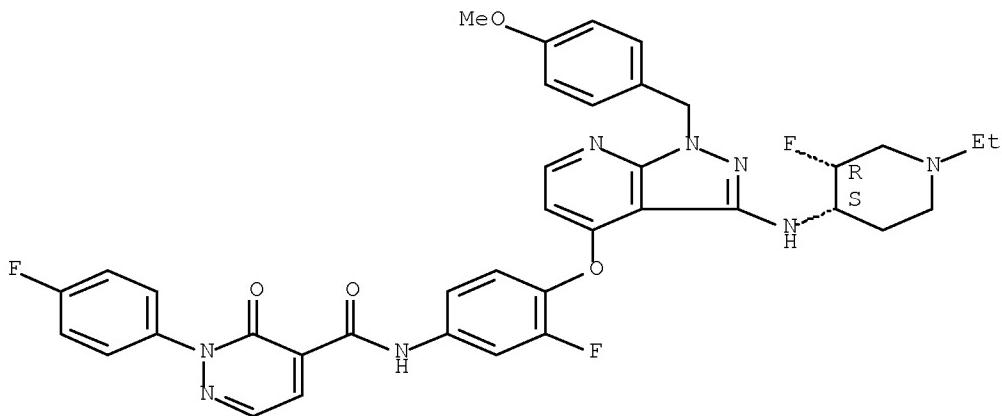
CM 2

CRN 76-05-1  
CMF C2 H F3 O2



RN 949560-08-1 CAPLUS  
CN 4-Pyridazinecarboxamide, N-[4-[[3-[(3R,4S)-1-ethyl-3-fluoro-4-piperidinyl]amino]-1-[(4-methoxyphenyl)methyl]-1H-pyrazolo[3,4-b]pyridin-4-yl]oxy]-3-fluorophenyl]-2-(4-fluorophenyl)-2,3-dihydro-3-oxo-, rel- (CA INDEX NAME)

Relative stereochemistry.



RN 949560-11-6 CAPLUS

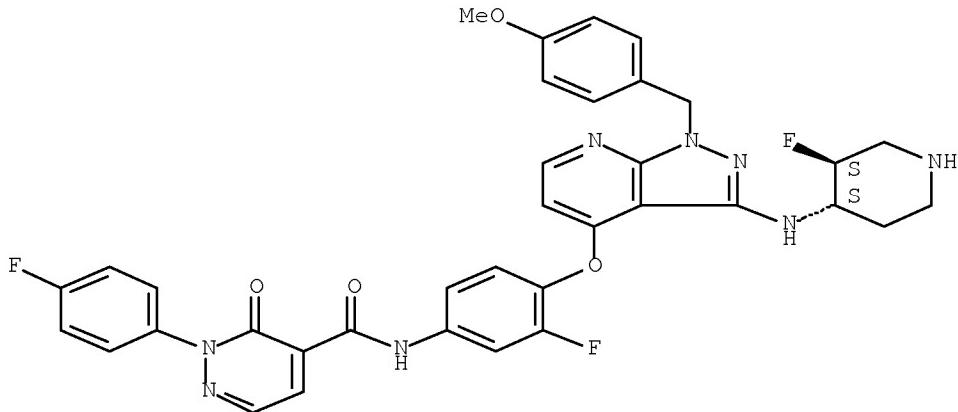
CN 4-Pyridazinecarboxamide, N-[3-fluoro-4-[(3R,4R)-3-fluoro-4-piperidinyl]amino]-1-[(4-methoxyphenyl)methyl]-1H-pyrazolo[3,4-b]pyridin-4-yl]oxy]phenyl]-2-(4-fluorophenyl)-2,3-dihydro-3-oxo-, rel-, 2,2,2-trifluoroacetate (1:2) (CA INDEX NAME)

CM 1

CRN 949560-10-5

CMF C36 H31 F3 N8 O4

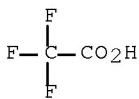
Relative stereochemistry.



CM 2

CRN 76-05-1

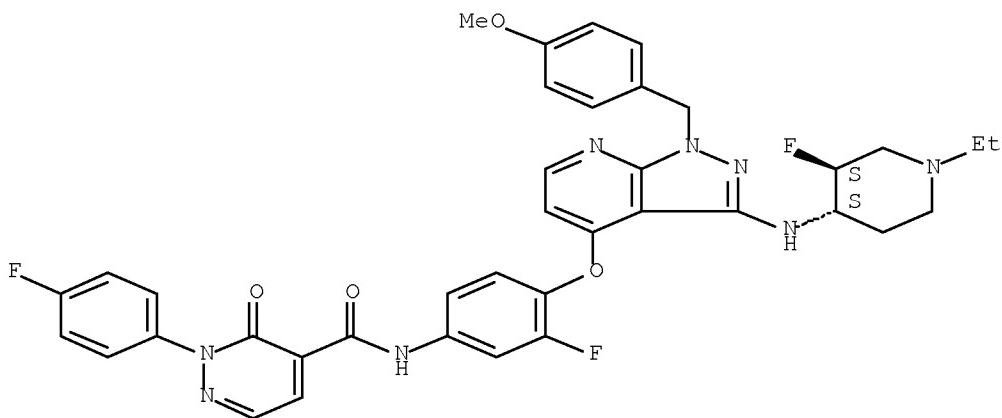
CMF C2 H F3 O2



RN 949560-12-7 CAPLUS

CN 4-Pyridazinecarboxamide, N-[4-[[3-[(3R,4R)-1-ethyl-3-fluoro-4-piperidinyl]amino]-1-[(4-methoxyphenyl)methyl]-1H-pyrazolo[3,4-b]pyridin-4-yl]oxy]-3-fluorophenyl]-2-(4-fluorophenyl)-2,3-dihydro-3-oxo-, rel- (CA INDEX NAME)

Relative stereochemistry.

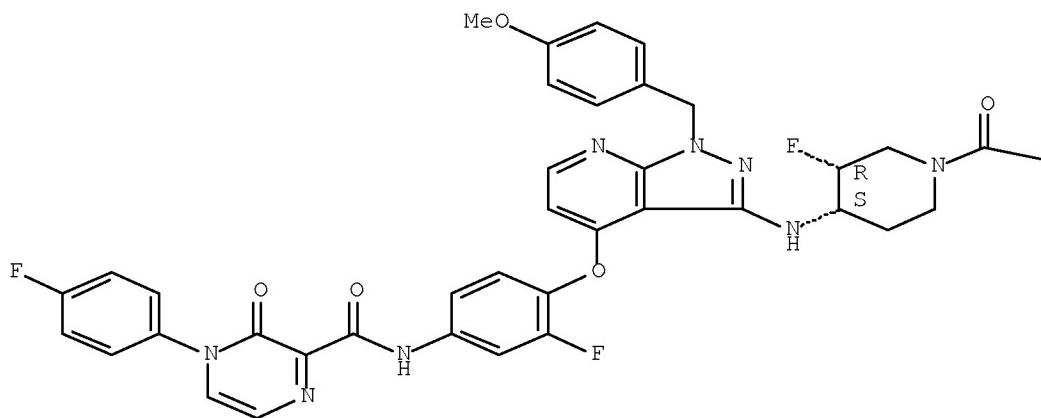


RN 949560-34-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 3-fluoro-4-[[4-[(4-fluorophenyl)-3,4-dihydro-3-oxo-2-pyrazinyl]carbonyl]amino]phenoxy]-1-[(4-methoxyphenyl)methyl]-1H-pyrazolo[3,4-b]pyridin-3-yl]amino]-, 1,1-dimethylethyl ester, (3R,4S)-rel- (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



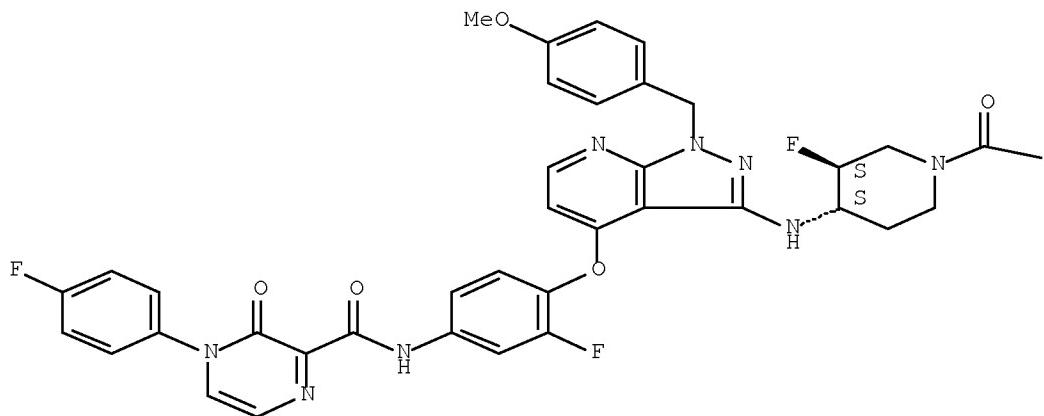
PAGE 1-B

—OBu-t

RN 949560-36-5 CAPLUS  
CN 1-Piperidinecarboxylic acid, 3-fluoro-4-[ [4-[2-fluoro-4-[ [4-(4-fluorophenyl)-3,4-dihydro-3-oxo-2-pyrazinyl]carbonyl]amino]phenoxy]-1-[ (4-methoxyphenyl)methyl]-1H-pyrazolo[3,4-b]pyridin-3-yl]amino]-, 1,1-dimethylethyl ester, (3R,4R)-rel- (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



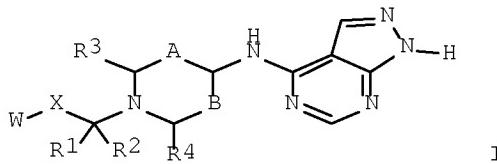
PAGE 1-B

—OBu-t

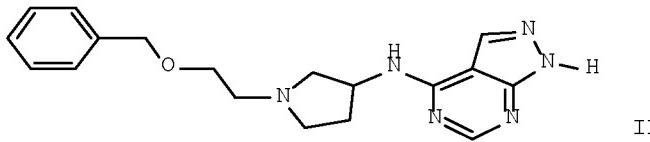
ACCESSION NUMBER: 2006:1124432 CAPLUS Full-text  
 DOCUMENT NUMBER: 145:455026  
 TITLE: N-alkyl-azacycloalkyl compounds as NMDA/NR2B antagonists and their preparation, pharmaceutical compositions, and use in the treatment of various diseases  
 INVENTOR(S): Layton, Mark E.; Rodzinak, Kevin J.; Kelly, Michael J., III; Sanderson, Philip E.  
 PATENT ASSIGNEE(S): Merck & Co., Inc., USA  
 SOURCE: PCT Int. Appl., 88pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006113471	A2	20061026	WO 2006-US14139	20060414
WO 2006113471	A3	20071213		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
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CA 2603876	A1	20061026	CA 2006-2603876	20060414
EP 1874318	A2	20080109	EP 2006-750229	20060414
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JP 2008536927	T	20080911	JP 2008-507751	20060414
IN 2007CN04217	A	20071221	IN 2007-CN4217	20070924
CN 101163482	A	20080416	CN 2006-80012726	20071017
PRIORITY APPLN. INFO.:			US 2005-672639P	P 20050419
			WO 2006-US14139	W 20060414

OTHER SOURCE(S): MARPAT 145:455026  
 GI



I



II

**AB** Compds. represented by formula I: and/or pharmaceutically acceptable salts, individual enantiomers and stereoisomers thereof, are effective as NMDA/NR2B antagonists useful for treating conditions such as pain, Parkinson's disease, Alzheimer's disease, epilepsy, depression, anxiety, ischemic brain injury including stroke. Compds. of formula I wherein W is (un)substituted (hetero)aryl; X is absent and (un)substituted C1-4 alkoxy and (un)substituted C1-3 alkyl; A is a bond and (un)substituted C2-3 alkyl, etc.; B is (un)substituted C1 alkyl, etc.; R1 and R2 are independently H and C1-3 alkyl; R3 and R4 are independently H, OH, CN and (un)substituted C1-3 alkyl, etc.; and their pharmaceutically acceptable salts, enantiomers and stereoisomers thereof are claimed. Example compound II was prepared by alkylation of tert-Bu pyrrolidin-3-ylcarbamate with [(2-bromoethoxy)methyl]benzene; the resulting tert-Bu [1-[2-(benzyloxy)ethyl]pyrrolidin-3-yl]carbamate underwent hydrolysis to give 1-[2-(benzyloxy)ethyl]pyrrolidin-3-amine, which underwent coupling with 4-chloro-1-(tetrahydropyran-2-yl)-1H-pyrazolo[3,4-d]pyrimidine to give compound II. All the invention compds. were evaluated for their NMDA/NR2B antagonistic activity.

**IT** 913574-47-7P 913574-48-8P 913574-49-9P  
 913574-50-2P 913574-51-3P 913574-52-4P  
 913574-53-5P 913574-54-6P 913574-55-7P  
 913574-56-8P 913574-66-0P 913574-67-1P

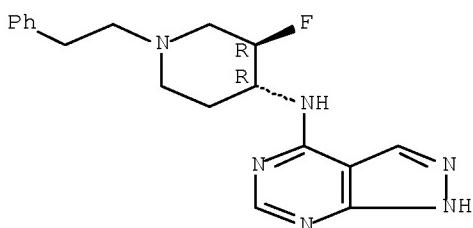
**RL:** PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of N-alkyl-azacycloalkyl as NMDA/NR2B antagonists useful in treatment of diseases)

**RN** 913574-47-7 CAPLUS

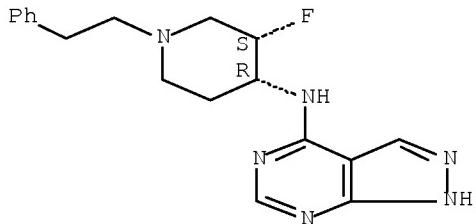
**CN** 1H-Pyrazolo[3,4-d]pyrimidin-4-amine,  
 N-[(3R,4R)-3-fluoro-1-(2-phenylethyl)-4-piperidinyl]-, rel- (CA INDEX NAME)

Relative stereochemistry.



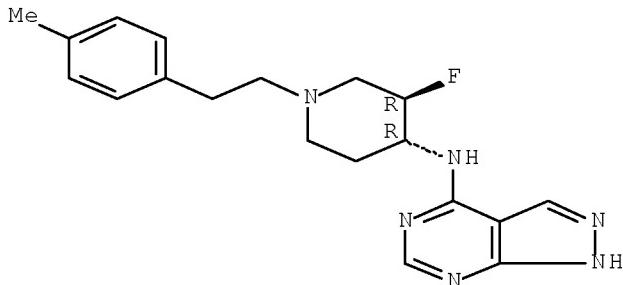
RN 913574-48-8 CAPLUS  
CN 1H-Pyrazolo[3,4-d]pyrimidin-4-amine,  
N-[ (3R, 4S)-3-fluoro-1-(2-phenylethyl)-4-piperidinyl]-, rel- (CA INDEX  
NAME)

Relative stereochemistry.



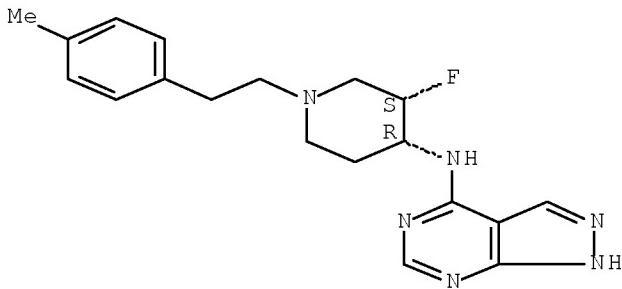
RN 913574-49-9 CAPLUS  
CN 1H-Pyrazolo[3,4-d]pyrimidin-4-amine,  
N-[ (3R, 4R)-3-fluoro-1-[2-(4-methylphenyl)ethyl]-4-piperidinyl]-, rel- (CA  
INDEX NAME)

Relative stereochemistry.



RN 913574-50-2 CAPLUS  
CN 1H-Pyrazolo[3,4-d]pyrimidin-4-amine,  
N-[ (3R, 4S)-3-fluoro-1-[2-(4-methylphenyl)ethyl]-4-piperidinyl]-, rel- (CA  
INDEX NAME)

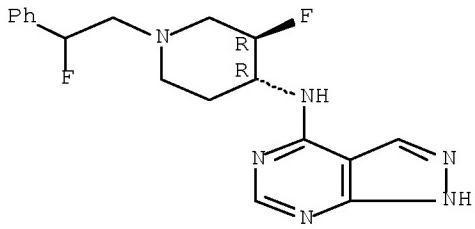
Relative stereochemistry.



RN 913574-51-3 CAPLUS

CN 1H-Pyrazolo[3,4-d]pyrimidin-4-amine,  
N-[(3R,4R)-3-fluoro-1-(2-fluoro-2-phenylethyl)-4-piperidinyl]-, rel- (CA  
INDEX NAME)

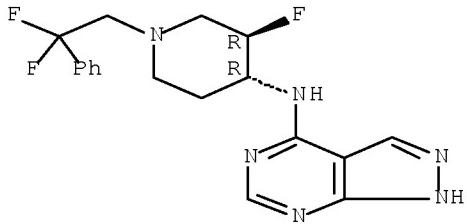
Relative stereochemistry.



RN 913574-52-4 CAPLUS

CN 1H-Pyrazolo[3,4-d]pyrimidin-4-amine,  
N-[(3R,4R)-1-(2,2-difluoro-2-phenylethyl)-3-fluoro-4-piperidinyl]-, rel-  
(CA INDEX NAME)

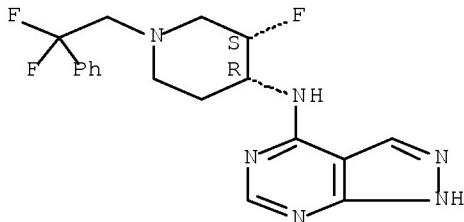
Relative stereochemistry.



RN 913574-53-5 CAPLUS

CN 1H-Pyrazolo[3,4-d]pyrimidin-4-amine,  
N-[(3R,4S)-1-(2,2-difluoro-2-phenylethyl)-3-fluoro-4-piperidinyl]-, rel-  
(CA INDEX NAME)

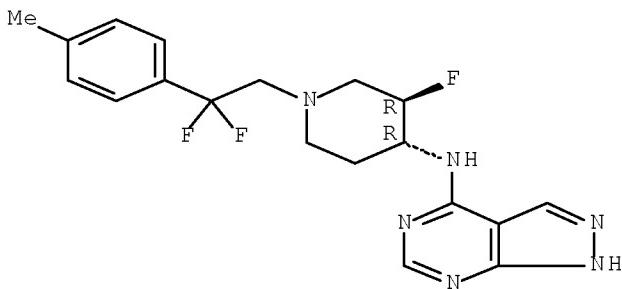
Relative stereochemistry.



RN 913574-54-6 CAPLUS

CN 1H-Pyrazolo[3,4-d]pyrimidin-4-amine,  
N-[(3R,4R)-1-[2,2-difluoro-2-(4-methylphenyl)ethyl]-3-fluoro-4-piperidinyl]-, rel- (CA INDEX NAME)

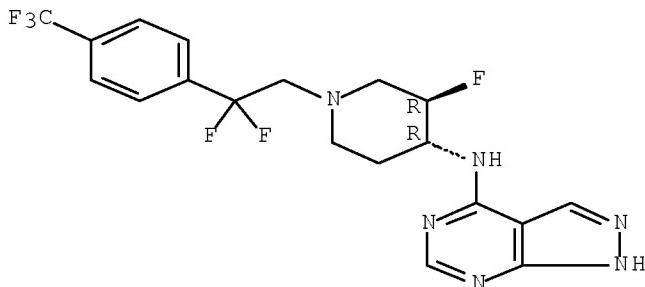
Relative stereochemistry.



RN 913574-55-7 CAPLUS

CN 1H-Pyrazolo[3,4-d]pyrimidin-4-amine,  
N-[(3R,4R)-1-[2,2-difluoro-2-[4-(trifluoromethyl)phenyl]ethyl]-3-fluoro-4-piperidinyl]-, rel- (CA INDEX NAME)

Relative stereochemistry.

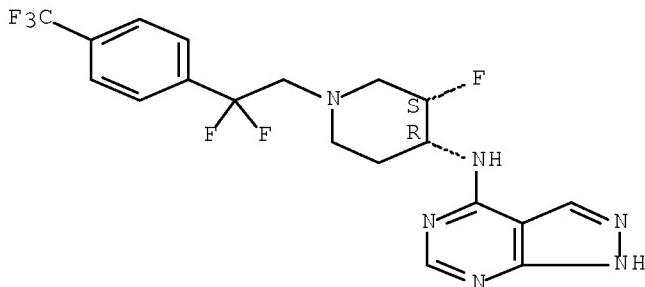


RN 913574-56-8 CAPLUS

CN 1H-Pyrazolo[3,4-d]pyrimidin-4-amine,  
N-[(3R,4S)-1-[2,2-difluoro-2-[4-(trifluoromethyl)phenyl]ethyl]-3-fluoro-4-

piperidinyl]-, rel- (CA INDEX NAME)

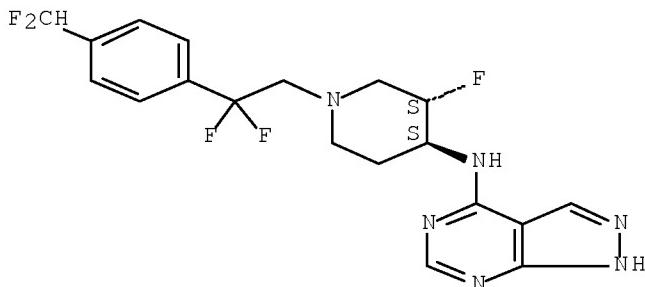
Relative stereochemistry.



RN 913574-66-0 CAPLUS

CN 1H-Pyrazolo[3,4-d]pyrimidin-4-amine,  
N-[(3R,4R)-1-[2-[4-(difluoromethyl)phenyl]-2,2-difluoroethyl]-3-fluoro-4-piperidinyl]-, rel- (CA INDEX NAME)

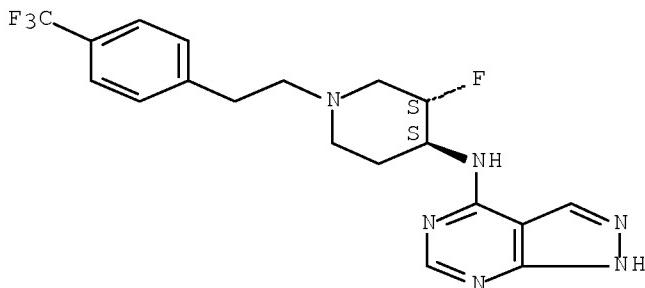
Relative stereochemistry.



RN 913574-67-1 CAPLUS

CN 1H-Pyrazolo[3,4-d]pyrimidin-4-amine,  
N-[(3R,4R)-3-fluoro-1-[2-[4-(trifluoromethyl)phenyl]ethyl]-4-piperidinyl]-, rel- (CA INDEX NAME)

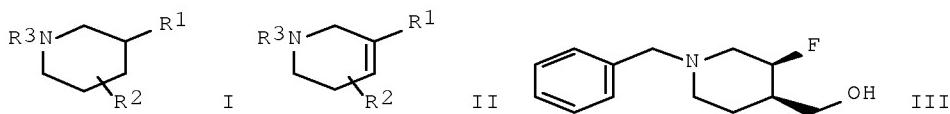
Relative stereochemistry.



L6 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2006:630453 CAPLUS Full-text  
 DOCUMENT NUMBER: 145:103564  
 TITLE: Process for preparation of chiral piperidines via asymmetric hydrogenation of dehydropiperidines using metal chiral phosphine catalyst complexes.  
 INVENTOR(S): Nelson, Todd D.; Kress, Michael H.; Krska, Shawn W.; Mitten, Jeffrey V.; Sun, Yongkui  
 PATENT ASSIGNEE(S): Merck & Co., Inc., USA  
 SOURCE: PCT Int. Appl., 45 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006069287	A1	20060629	WO 2005-US46718	20051221
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
AU 2005319071	A1	20060629	AU 2005-319071	20051221
CA 2591738	A1	20060629	CA 2005-2591738	20051221
EP 1838673	A1	20071003	EP 2005-855301	20051221
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
CN 101084191	A	20071205	CN 2005-80044112	20051221
JP 2008525486	T	20080717	JP 2007-548500	20051221
IN 2007CN02318	A	20070907	IN 2007-CN2318	20070529
US 20080086006	A1	20080410	US 2007-793944	20071203
PRIORITY APPLN. INFO.:			US 2004-638157P	P 20041222
			WO 2005-US46718	W 20051221

OTHER SOURCE(S): CASREACT 145:103564; MARPAT 145:103564  
 GI



AB Title compds. [I; R1 = halo, O, CONH2, N, S, Si, (substituted) alkyl, aryl; R2 = O, amino, halo, CONH2, N, S, (substituted) alkyl; R3 = S, (substituted)

alkyl, aryl, P, Si, PhCH<sub>2</sub>, CBZ, carbamate, alkylaryl, aryloxycarbonyl], were prepared by asym. reduction of dehydropiperidines (II; variables as above) in the presence of metal precursors complexed to mono- or biphosphine ligands. Thus, II.HCl (R<sub>1</sub> = F; R<sub>2</sub> = 4-CH<sub>2</sub>OH; R<sub>3</sub> = PhCH<sub>2</sub>) (preparation given) was hydrogenated in CH<sub>2</sub>Cl<sub>2</sub> in the presence of (R,R)-Walphos and [(COD)RhCl]<sub>2</sub> under 85 psig H<sub>2</sub> at 50° for 18.75 h to give 74.4% title compound (III).

IT 808733-05-3P

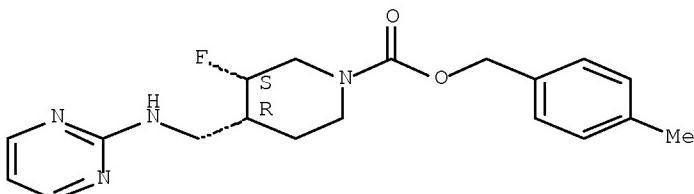
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of chiral piperidines via asym. hydrogenation of dehydropiperidines using metal chiral phosphine catalyst complexes)

RN 808733-05-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 3-fluoro-4-[(2-pyrimidinylamino)methyl]-, (4-methylphenyl)methyl ester, (3R,4S)-rel- (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:1080888 CAPLUS Full-text

DOCUMENT NUMBER: 142:56340

TITLE: 4-Heteroarylaminoo-substituted 3-fluoro-piperidines as NMDA/NR2B antagonists, and their preparation, pharmaceutical compositions, and methods of use

INVENTOR(S): Liverton, Nigel J.; Claiborne, Christopher F.; Claremon, David A.; McCauley, John A.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE: PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

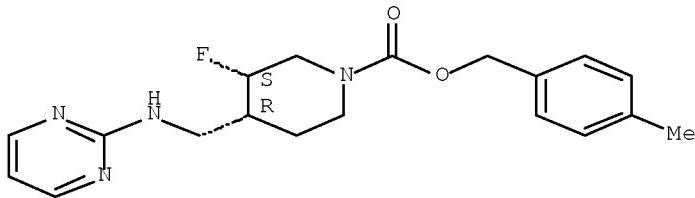
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004108705	A1	20041216	WO 2004-US17175	20040528
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,				

SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,  
 SN, TD, TG  
 AU 2004245522 A1 20041216 AU 2004-245522 20040528  
 CA 2527093 A1 20041216 CA 2004-2527093 20040528  
 EP 1648882 A1 20060426 EP 2004-753896 20040528  
 EP 1648882 B1 20080806  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR  
 BR 2004010837 A 20060627 BR 2004-10837 20040528  
 CN 1798744 A 20060705 CN 2004-80015322 20040528  
 JP 2006526650 T 20061124 JP 2006-515051 20040528  
 JP 3927228 B2 20070606  
 AT 403651 T 20080815 AT 2004-753896 20040528  
 MX 2005PA13151 A 20060317 MX 2005-PA13151 20051202  
 IN 2005DN05951 A 20080509 IN 2005-DN5951 20051220  
 NO 2006000020 A 20060303 NO 2006-20 20060103  
 PRIORITY APPLN. INFO.: US 2003-475938P P 20030604  
 OTHER SOURCE(S): MARPAT 142:56340 WO 2004-US17175 W 20040528  
 GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

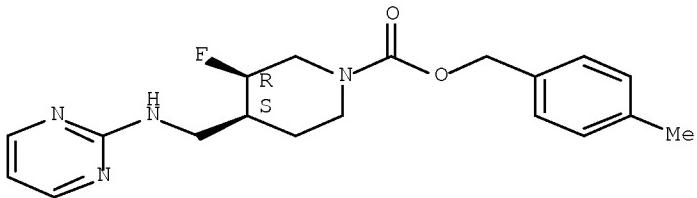
- AB Title compds. I and their pharmaceutically acceptable salts are disclosed [wherein: HetAr is a 5- or 6-membered heteroarom. ring containing 1 or 2 N ring atoms, thiazolyl, or thiadiazolyl; HetAr is optionally substituted with 1 or 2 substituents, each substituent independently is C1-4 alkyl, F, Cl, Br, or iodo; A is a bond or C1-2 alkylene; and B is aryl-(CH<sub>2</sub>)<sub>0-3</sub>O-C(=O)-, indanyl-(CH<sub>2</sub>)<sub>0-3</sub>O-C(=O)-, aryl-(CH<sub>2</sub>)<sub>1-3</sub>C(=O)-, arylcyclopropyl-C(=O)-, or aryl-(CH<sub>2</sub>)<sub>1-3</sub>NHC(=O)-, wherein any aryl is optionally substituted by 1-5 substituents, each substituent is independently C1-4 alkyl, F, or Cl]. I are effective as NMDA NR2B antagonists, useful for treating conditions such as, for example, Parkinson's disease, Alzheimer's disease, migraine, epilepsy and pain. Seven specific examples are claimed, and these plus various salts were prepared. For instance, invention compound II was prepared in 8 steps: (1) coupling of CDI with 4-MeC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>OH and 4-piperidone HCl; (2)  $\alpha$ -fluorination of the piperidone carbonyl; (3) Wittig reaction of the piperidone carbonyl with Ph<sub>3</sub>P:CHCO<sub>2</sub>Et; (4) stereoselective reduction of the resulting olefin to give primarily cis-isomeric ester III; (5) alkaline saponification of the Et ester; (6) conversion of the resulting acid to an amine with diphenylphosphoryl azide; (7) heteroarylation of the amine with 2-chloropyrimidine; and (8) chiral HPLC. In both (1) a cell-based functional assay to determine IC<sub>50</sub> for inhibition of NR1A/NR2B receptors in Ltk- cells, and (2) a radioligand binding assay using tritiated AMD-2 (preparation given) to determine Ki, compds. I had values of less than 50  $\mu$ M, with these values advantageously being even lower than 0.1  $\mu$ M.
- IT 808732-98-1P, (-)-(3S,4R)-4-Methylbenzyl 3-fluoro-4-[(pyrimidin-2-ylamino)methyl]piperidine-1-carboxylate  
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (drug candidate; preparation of heteroaryl amino-substituted fluoropiperidines as NMDA/NR2B receptor antagonists)
- RN 808732-98-1 CAPLUS
- CN 1-Piperidinecarboxylic acid, 3-fluoro-4-[(2-pyrimidinylamino)methyl]-, (4-methylphenyl)methyl ester, (3S,4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



- IT 808732-99-2P, (+)-(3R,4S)-4-Methylbenzyl  
3-fluoro-4-[(pyrimidin-2-ylamino)methyl]piperidine-1-carboxylate  
808733-00-8P, (-)-trans-4-Methylbenzyl  
3-fluoro-4-[(pyrimidin-2-ylamino)methyl]piperidine-1-carboxylate  
808733-01-9P, (+)-trans-4-Methylbenzyl  
3-fluoro-4-[(pyrimidin-2-ylamino)methyl]piperidine-1-carboxylate  
808733-02-0P, (-)-N-[(3S,4R)-cis-3-Fluoro-1-[(1R,2R)-2-phenylcyclopropyl]carbonyl]piperidin-4-yl]methyl]pyrimidin-2-amine  
808733-03-1P, (-)-cis-4-Methylbenzyl  
3-fluoro-4-[(1,3,4-thiadiazol-2-ylamino)methyl]piperidine-1-carboxylate  
808733-04-2P, (+)-trans-4-Methylbenzyl  
3-fluoro-4-[(1,3,4-thiadiazol-2-ylamino)methyl]piperidine-1-carboxylate  
808733-05-3P, cis-4-Methylbenzyl  
3-fluoro-4-[(pyrimidin-2-ylamino)methyl]piperidine-1-carboxylate  
808733-06-4P, (-)-(3S,4R)-4-Methylbenzyl  
3-fluoro-4-[(pyrimidin-2-ylamino)methyl]piperidine-1-carboxylate hydrochloride 808733-07-5P, (+)-(3R,4S)-4-Methylbenzyl  
3-fluoro-4-[(pyrimidin-2-ylamino)methyl]piperidine-1-carboxylate hydrochloride 808733-08-6P, (-)-trans-4-Methylbenzyl  
3-fluoro-4-[(pyrimidin-2-ylamino)methyl]piperidine-1-carboxylate hydrochloride 808733-09-7P, (+)-trans-4-Methylbenzyl  
3-fluoro-4-[(pyrimidin-2-ylamino)methyl]piperidine-1-carboxylate hydrochloride 808733-10-0P,  
(-)-N-[(3S,4R)-cis-3-Fluoro-1-[(1R,2R)-2-phenylcyclopropyl]carbonyl]piperidin-4-yl]methyl]pyrimidin-2-amine hydrochloride 808733-11-1P, (-)-cis-4-Methylbenzyl  
3-fluoro-4-[(1,3,4-thiadiazol-2-ylamino)methyl]piperidine-1-carboxylate hydrochloride  
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(drug candidate; preparation of heteroarylamino-substituted fluoropiperidines as NMDA/NR2B receptor antagonists)
- RN 808732-99-2 CAPLUS
- CN 1-Piperidinecarboxylic acid, 3-fluoro-4-[(2-pyrimidinylamino)methyl]-, (4-methylphenyl)methyl ester, (3R,4S)- (CA INDEX NAME)

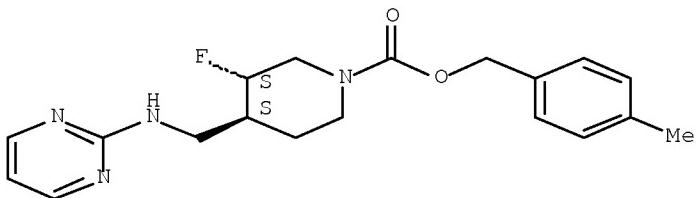
Absolute stereochemistry. Rotation (+).



RN 808733-00-8 CAPLUS

CN 1-Piperidinecarboxylic acid, 3-fluoro-4-[(2-pyrimidinylamino)methyl]-, (4-methylphenyl)methyl ester, (3S,4S)-rel-(-)- (CA INDEX NAME)

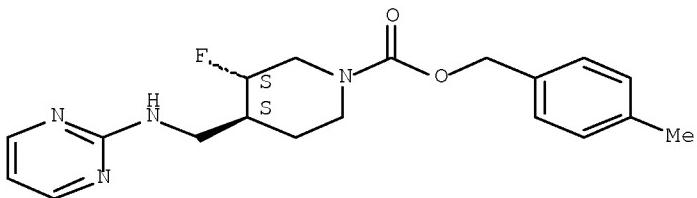
Rotation (-). Absolute stereochemistry unknown.



RN 808733-01-9 CAPLUS

CN 1-Piperidinecarboxylic acid, 3-fluoro-4-[(2-pyrimidinylamino)methyl]-, (4-methylphenyl)methyl ester, (3R,4R)-rel-(+)- (CA INDEX NAME)

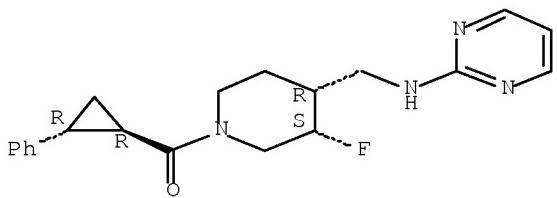
Rotation (+). Absolute stereochemistry unknown.



RN 808733-02-0 CAPLUS

CN Methanone, [(3S,4R)-3-fluoro-4-[(2-pyrimidinylamino)methyl]-1-piperidinyl][(1R,2R)-2-phenylcyclopropyl]- (CA INDEX NAME)

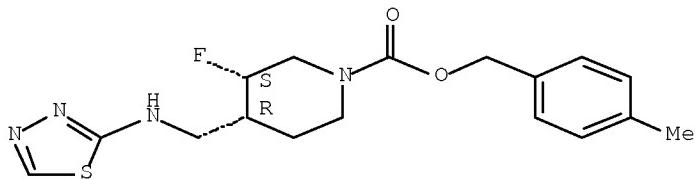
Absolute stereochemistry. Rotation (-).



RN 808733-03-1 CAPLUS

CN 1-Piperidinecarboxylic acid, 3-fluoro-4-[(1,3,4-thiadiazol-2-ylamino)methyl]-, (4-methylphenyl)methyl ester, (3S,4R)-rel-(-) - (CA INDEX NAME)

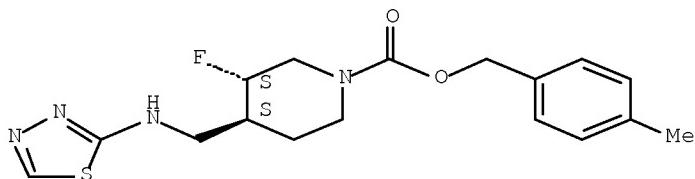
Rotation (-). Absolute stereochemistry unknown.



RN 808733-04-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 3-fluoro-4-[(1,3,4-thiadiazol-2-ylamino)methyl]-, (4-methylphenyl)methyl ester, (3R,4R)-rel-(+)- (CA INDEX NAME)

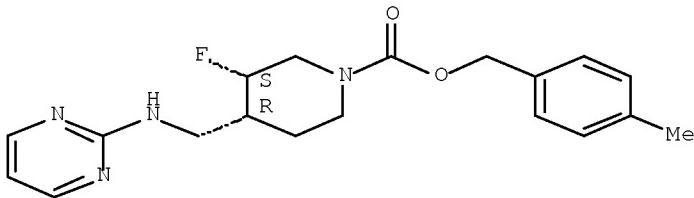
Rotation (+). Absolute stereochemistry unknown.



RN 808733-05-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 3-fluoro-4-[(2-pyrimidinylamino)methyl]-, (4-methylphenyl)methyl ester, (3R,4S)-rel- (CA INDEX NAME)

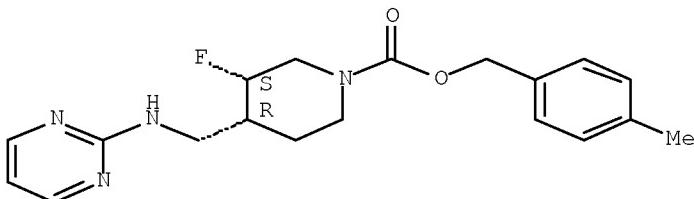
Relative stereochemistry.



RN 808733-06-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 3-fluoro-4-[(2-pyrimidinylamino)methyl]-, (4-methylphenyl)methyl ester, hydrochloride (1:1), (3S,4R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

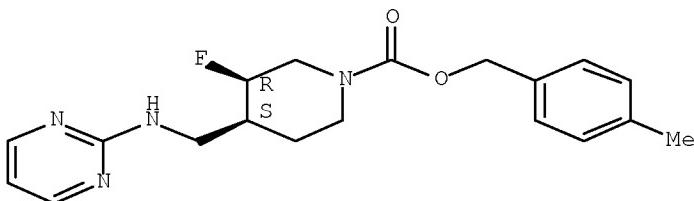


● HCl

RN 808733-07-5 CAPLUS

CN 1-Piperidinecarboxylic acid, 3-fluoro-4-[(2-pyrimidinylamino)methyl]-, (4-methylphenyl)methyl ester, hydrochloride (1:1), (3R,4S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

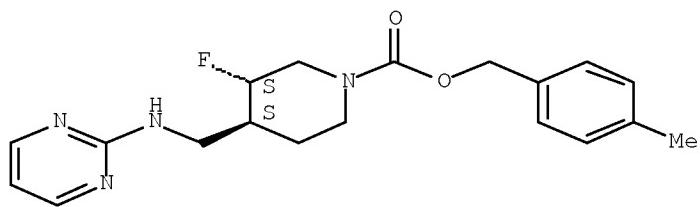


● HCl

RN 808733-08-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 3-fluoro-4-[(2-pyrimidinylamino)methyl]-, (4-methylphenyl)methyl ester, hydrochloride (1:1), (3S,4S)-rel-(-)- (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

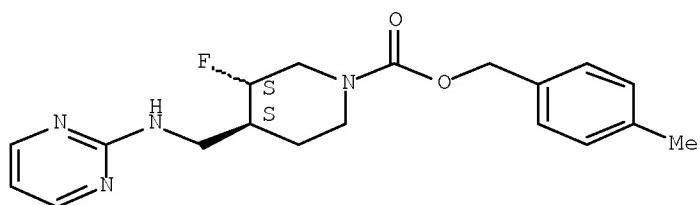


● HCl

RN 808733-09-7 CAPLUS

CN 1-Piperidinecarboxylic acid, 3-fluoro-4-[(2-pyrimidinylamino)methyl]-, (4-methylphenyl)methyl ester, hydrochloride (1:1), (3R,4R)-rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

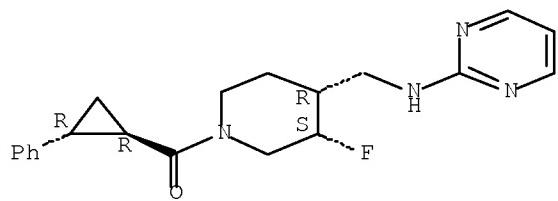


● HCl

RN 808733-10-0 CAPLUS

CN Methanone, [(3S,4R)-3-fluoro-4-[(2-pyrimidinylamino)methyl]-1-piperidinyl][(1R,2R)-2-phenylcyclopropyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

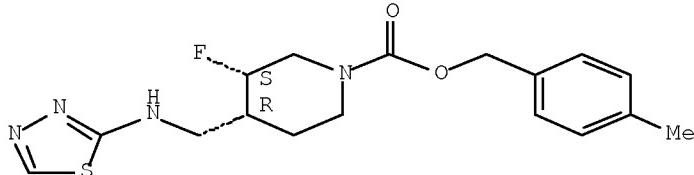


● HCl

RN 808733-11-1 CAPLUS

CN 1-Piperidinecarboxylic acid, 3-fluoro-4-[(1,3,4-thiadiazol-2-ylamino)methyl]-, (4-methylphenyl)methyl ester, hydrochloride (1:1), (3S,4R)-rel-(-) - (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.



● HC1

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> LOGOFF Y  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION

FULL ESTIMATED COST

39.11 221.36

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION

CA SUBSCRIBER PRICE

-5.60 -5.60

STN INTERNATIONAL LOGOFF AT 15:35:02 ON 17 NOV 2008